SAFETY Education

NOVEMBER
1951

Two Sections · Section One

The **NATIONAL SAFETY COUNCIL**, the heart of the safety movement in America, collects and distributes information about accidents and methods for their prevention. Organized on a nonprofit basis, the Council promotes safety in industry, traffic, school, home and on the farm.

SAFETY EDUCATION is the official publication of the School and College Division of the Council.

Headquarters: 425 N. Michigan Avenue, Chicago 11, Ill.

NED H. DEARBORN, president, National Safety Council

WAYNE P. HUGHES, director, School and College Division

HEROLD C. HUNT, vice president for schools and colleges, National Safety Council.

School and College Conference, 1951-52

JOHN W. STUDEBAKER, Chairman
FRANK C. ABBOTT
ARTHUR S. ADAMS
JOHN J. AHERN
W. W. BAUER
NORMAN E. BORGERSON
RUTH A. BOTTOMLY
EARL H. BREON
PERCY BUGBEE
ZENAS R. CLARK
THOMAS W. CLIFT
JOHN E. CORBALLY
WALTER A. CUTTER
M. R. DARLING, JR.
L. H. DENNIS
RAY O. DUNCAN
RUTH EVANS
ROY FAIRBROTHER
FLORENCE FALLGATTER
LOWELL B. FISHER
ARTHUR K. FLANAGAN
A. E. FLORIO
DON GAVIT
GORDON C. GRAHAM
JAMES J. GRIFFIN
FRED V. HEIN
THOMAS J. HIGGINS
CLAUDE W. HIPPLER
DE WITT HUNT
HEROLD C. HUNT
HAROLD K. JACK
HARRY R. JACKSON
H. W. JAMES
STEPHEN JAMES
GEORGE JENNINGS
HELEN K. KNANDEL
MRS. FRED W. KNIGHT
HAROLD F. LILLIE
FORREST E. LONG
JOHN R. LUDINGTON
C. BENTON MANLEY
JAMES W. MANN
CHARLES A. MILLER
M. D. MOBLEY
BERNICE MOSS
MAURICE G. OSBORNE
M. R. OWENS
H. V. PORTER
MRS. GLADYS POTTER
A. H. PRITZLAFF
PETER B. RITZMA
C. A. SEMLER
LESLIE SILVERNALE
HERBERT J. STACK
JOHNN W. STUDEBAKER
RANDALL C. SWANSON
GEORGE C. TRAVER
FRANK H. TROTTER
EDWARD M. TUTTLE
N. E. VILES
MABEL R. WALTER
C. E. WETMORE
GILBERT S. WILLEY
WALTER R. WILLIAMS, JR.
BERT L. WOODCOCK
MARY MAY WYMAN
MERRILL C. YOST

SAFETY EDUCATION

Volume XXXI
No. 3
Section One

• • *A MAGAZINE FOR TEACHERS AND ADMINISTRATORS*

EDUCATIONAL PRESS ASSOCIATION OF AMERICA

CHARLES W. TAYLOR, *Editor*
C. H. MILLER, *Advertising Manager*
BILL ANDREWS, *Editorial Director*

CONTENTS

Civil Defense Program in Fourth of Schools —Mary Anne Raywid 2
Bomb Danger Entails Three Responsibilities —Gordon C. Graham 3
Learning Is Useless Unless Child Lives —Mary McGinley 6
Approve Women Guards for School Crossings —B. L. Corbett 10
Minnesota Youngsters Take Patrol Pledge 13
Safety Week a Tool to Get Cooperation —E. R. Abramoski 14
Gun Accidents Claimed 2,350 Victims Last Year 16
Buffalo Posters 20
Pupil-Teachers Do Well in Driver Education —J. B. Frichtman 24
Is He a Tattle-tale or Brother's Keeper —Vivian Weedon 26

Departments

Data Sheet No. 57—Safety in the Auto Shop 17
Lesson Units 27

SCHOOL AND COLLEGE COMMITTEES

Safety Education Supervisors' Section
Chairman: **CLAUDE W. HIPPLER**, Director, Child Welfare and Safety Education, Public Schools, Pasadena, Cal.

Elementary School Section
Chairman: **JAMES W. MANN**, Principal, Hubbard Woods School, Winnetka, Ill.

Secondary School Committee
Chairman: **C. BENTON MANLEY**, Director of Secondary Education, Springfield Public Schools, Springfield, Mo.

Higher Education Committee
Chairman: **H. W. JAMES**, President, New Mexico Western College, Silver City, N. M.

Driver Education Section
Chairman: **A. E. FLORIO**, Supervisor of Safety Education Activities for the School of Physical Education, University of Illinois, Urbana, Ill.

Standard Student Accident Report Committee
Chairman: **ZENAS R. CLARK**, Administrative Assistant, Wilmington (Del.) Public Schools.

Contents of SAFETY EDUCATION are regularly listed in "Education Index."

SAFETY EDUCATION is published monthly, September through May, in two sections by the National Safety Council, 425 N. Michigan Ave., Chicago 11, Ill. Entered as second class matter, September 13, 1938, at the Post Office at Chicago, Ill., under the act of March 3, 1879. Copyright, 1951, by the National Safety Council. Printed in the U.S.A. Subscription price $3.30 a year. Reduced prices for quantity orders.

Over my shoulder

Count on Texas to come up with an unusual idea. In Port Neches, the board of trustees has approved the use of High school pupils as behind-the-wheel driving instructors. And it has some indirect benefits, too.

Nobody loves the tattler but the responsible person must be informed about the unsafe practices which may be going on in the school. How to get the information without creating a tattler is skillfully told by Vivian Weedon.

In the October issue of SAFETY EDUCATION Irmagene N. Holloway wrote of a survey covering 16 cities which use auxiliary police as school crossing guards. Dr. B. L. Corbett, executive director, Milwaukee Safety Commission, tells here in detail of Milwaukee's experience with women as auxiliaries.

Dan Hoan, erstwhile long-time mayor, used to brag that Milwaukee was such a consistent winner of the National Traffic Safety Contest that the community had been barred from further competition. Not quite true. But the Wisconsin city's enviable record makes her practices worthy of consideration.

When outside safety experts come,
Regardless of the place they're from,
They ask a million questions quick:
"Do you integrate? Are you specific?"

Well it's nice to sit back and relax
And definitely relate the fact
That here and there you correlate
And then, again, you integrate.

Now—it's wonderful to be so sure
That you alone have found the cure.
But don't forget—make no mistake—
It could as well be "disintegrate."

—R. L. Barrick

Mr. Barrick, supervisor of the section on safety education of the Pittsburgh, Pa., public schools, expressed his puzzlement at the problem of integration in the preceding lines when he acted as chairman of a panel on integration at the 39th National Safety Congress. Miss McGinley's article might be a reply.

Lacking a time device which would give a clear and certain view of the future, one cannot assess the immediate value of the twin articles which lead this issue of Safety Education. Gordon Graham, who details the steps taken by Detroit to minimize the damage of a possible bomb, says with a great deal of justification that regardless of your personal opinion of the imminence or improbability of an attack you have a very heavy moral responsibility. Miss Raywid tells in general what the nation's schools are doing. She wrote the article at the suggestion of Stanley Abercrombie of the NEA.

—Robert F. Borkenstein, Indiana State Police

Edward Weeks, editor of the Atlantic Monthly, in a recent broadcast said that he had never learned to teach his son responsibility until he got out into the open with him. This month's cover, besides pointing up the seasonal increase in deaths due to firearm accidents, suggests one seasonal way of teaching the high school age boy responsibility.

Civil Defense Program In Fourth of Schools

by MARY ANNE RAYWID

SCHOOL civil defense programs throughout the country are based on the wise assumption that an enemy's bombs would not fall solely on our factories and railroads. Victims would also be claimed from among our homes, stores, hospitals, and our schools.

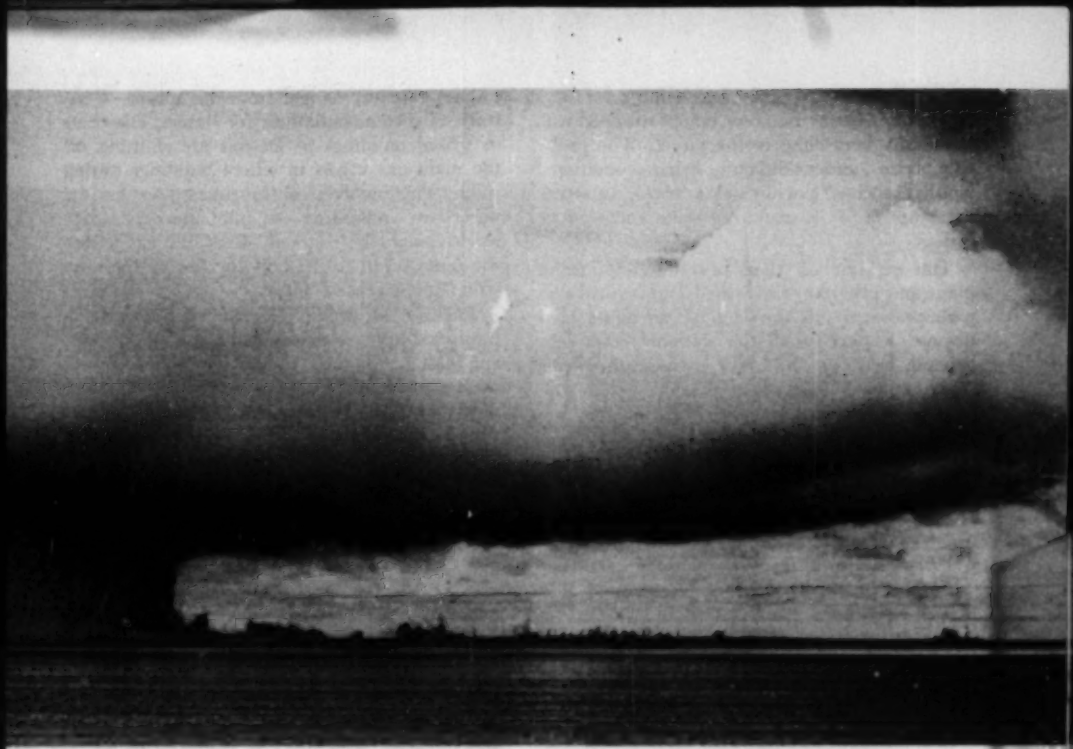
The relative danger of an air attack, of course, depends upon many factors: the geographical location and size of the community, the location of the school within the community and the industrial importance of the community are just a few of these factors. Many communities feel seriously threatened because of their proximity to a potential target area or because they lie on a returning air route from that area, where unexploded bombs might be dumped.

For these and many other reasons, a great number of our schools have seen fit to undertake varying degrees of defense preparedness. A survey of public school systems, conducted by the National Education Association's division, revealed in February, 1951, that

Twenty-five and three-tenths percent of the 2,091 systems reporting had a civil

to page 38

MARY ANNE RAYWID is an editorial assistant of the National Commission on Safety Education of the National Education Association, Washington, D. C.



Bomb Danger Entails Three Responsibilities

by GORDON C. GRAHAM

NO MATTER what our personal beliefs are concerning the imminence of atomic attack in this country and in our immediate vicinity, we certainly bear a very heavy moral responsibility to be prepared as a school system and to prepare the pupils in our charge to meet these exigencies.

Better this, than to discover too late that hundreds of lives might have been saved if we had only assumed a more realistic attitude toward the current international situation.

The tide of public opinion concerning the probability of atomic attack ebbs and flows with the kaleidoscopic aspects of international politics. Many areas of our country, particularly rural areas, show no evident concern over the threat. However, in those cities lying within the primary target areas, most school administrators feel that the schools must be adequately prepared for disaster even if disaster never comes.

In some instances schools in a major city are actively preparing while those in the suburbs around the periphery show no special concern, feeling that their big neighbor is the primary target area.

It might be suggested to these marginal doubters that we have no assurance that, first,

GORDON C. GRAHAM is supervisor, safety education department, Detroit public schools.

the enemy will drop only one bomb on a city, or second, that the bomb or bombs dropped will necessarily land close to the target. The probable error under difficult flying conditions, especially when pursuit takes place, is sometimes apt to be a matter of miles rather than feet.

The pattern of these disaster minimizing plans and programs has varied a great deal due perhaps largely to the lack of adequate civil defense leadership at the national level. In general, however, the plans envisage three primary responsibilities.

I. *Protective measures.*

II. *Educational responsibilities to the children.*

III. *Educational responsibilities to the community.*

Protective Measures.

There are three functions classified as protective measures:

a. protection to the children during school hours;

b. protection to post-raid refugees; and,

c. responsibilities to civil defense agencies.

The protection of children against death or injury from air raids occurring during school hours involves the selection of refugee areas within the school building and the organization and conduct of air raid drills.

Most authorities now seem to agree that because of the terrific pressures involved in atomic blasts, particularly those of the purportedly more powerful new weapons, buildings are apt to be virtually sheared off at the ground-level and reduced to an adjacent heap of rubble.

Basement Is Safest

If this thesis be correct then, in terms of relative safety at least, the basement areas would certainly be the choicest area wherever they are available. It is just a question of where the probabilities of survival are greatest. Despite the handicaps of insufficient exits from such areas, despite the possibility of imprisonment beneath the debris until such time as rescue teams can begin to function, the below grade locations are the preferable areas. Schools in the warmer parts of the nation which have no basement areas must resort to first-floor shelters.

Questions have been raised as to the hazards of steam, gas and water pipes. With the low pressure boilers which are in use in most schools, engineers find it possible to reduce steam pressure sufficiently in from five to seven minutes to eliminate any danger from this source. Contrary to recommendations for homes, engineers in school buildings in Detroit are shutting off the main gas valves in school buildings during raids. This involves careful precautions for the immediate relighting of pilot burners when service might be restored. Only the gas within the pipes is left in the building during the raid. This is not a serious hazard.

The use of protective materials on glass is presumed to be relatively ineffective under present blast conditions. In the selection of refuge areas care should be used to place the children away from glassed areas where possible. When this is not possible, the children are usually taught to seek shelter beneath desks, tables or similar protective objects.

The use of these refuge areas presumes, of course, that an adequate air-raid warning system has been devised and is in operation. In cities where sirens have been installed, school children would occupy their shelter areas whenever the general public takes refuge. Where such sirens are not yet provided workable telephone relay systems have been perfected by which all schools may be notified within a matter of minutes.

Classroom work, conducted in the refuge area, removes some of strangeness from air-raid drills.

Detroit's 265 schools receive this notice in approximately seven minutes.

Schools have organized air-raid drills in most large cities and these are regularly conducted usually at least once a month. The time required for the children to reach their refuge area varies from two to ten minutes depending upon such things as the number of children, the size of the building, the location of the refuge area, the number of entrances and similar factors.

Much has been done to condition children to the whole idea of air-raid drills. So that their participation does not develop unwarranted fears, many schools have arranged for

the singing of songs, the telling of stories, the playing of records and the using of other similar devices while the children are in the refuge area.

In Detroit battery operated lanterns have been installed in all shelter areas to provide light should there be a failure of the central power system. Drinking water has been made available. The floor drains in the plenum areas can, if necessary, be used as emergency toilets.

The schools have an even larger responsibility to the community in the post-raid use of school facilities by many of the civil defense welfare services. This would include providing sleeping

Pupil helpers make descent of steep basement stairs easier and safer for little children during drills.

quarters for refugees from the bombed areas, a place to be fed, to receive emergency clothing and to be registered so that separated members of a family might be brought together again. In some instances entire school buildings would be surrendered to the medical services for use as emergency hospitals, first aid stations and the like.

During this post-raid period school buildings would also undoubtedly be used as a point of operation for the various civil defense agencies including not only those enumerated above but in all likelihood would be used by air-raid wardens, rescue teams, first aid squads, decontamination groups and police and fire units.

There is a very selfish and practical reason why schoolmen should energetically move into the emergency shelter program of the civil defense organizations in their community during this organizational stage rather than to wait for the schools to be commandeered.

If the schools are commandeered the buildings would undoubtedly be manned by volunteer civil defense workers who have little knowledge of the school plant and no particular concern for safeguarding it. Purely in the interests of protecting our school buildings and equipment, it would seem logical for us not to wait but to step in and play an active role in civil defense precautions.

Pre-raid and post-raid evacuation plans are in the discussion stage in many cities and must form a part of our thinking. While there are many objections to mass evacuation of pupils from city schools to rural areas, objections based on some unfortunate experiences in London, Berlin and elsewhere, it is still a possibility, according to civil defense authorities, that it might be necessary.

If such a hegira should be ordered, it is probable that the child evacuation would be by class groups within certain age-grade limitations and that the teachers would accompany their pupils to the reception areas.

Once in the new location the teacher would not only continue instruction but would also act

to page 36

The timid youngster is reassured when his teacher holds his hand as the group walks to the shelter.

the enemy will drop only one bomb on a city, or second, that the bomb or bombs dropped will necessarily [illegible] able error especially times ap feet.

The p plans and perhaps defense general, mary res

I. *F*

II. *E d*

III. *E m*

Protectiv

There tective m

a. p school

b. p

c. re cies.

The pr injury fr hours in within th and cond

Most because atomic b portedly are apt to level and

Basement

If this tive safet certainly available. probabilit handicap despite th the debris begin to are the p parts of areas mus

Questio of steam, pressure b engineers sure sufficiently in from five to seven minutes

to eliminate any danger from this source. Contrary to recommendations for homes, engineers [illegible]

ranted fears, many schools have arranged for

the singing of songs, the telling of stories, the playing of records and the using of other simi-

fense organizations in their community during this organizational stage rather than to wait for

SAFETY our American Heritage

he build-
by volun-
le knowl-
particular
n the in-
lings and
r us not
ctive role

plans are
and must
there are
of pupils
ons based
'London,
ossibility,
s, that it

red, it is
uld be by
imitations
any their

her would
d also act

o page 36

his teacher
holds his hand as the group walks to the shelter.

the emergency shelter program of the civil de-

the enemy will drop only one bomb on a city, or second, that the bomb or bombs dropped will necessarily [illegible] able erro especially times apt feet.

The p plans and perhaps defense general, mary resp

I. *P*

II. *E d*

III. *E m*

Protective

There tective m

a. p school

b. p

c. r cies.

The pr injury fr hours in within th and cond

Most because atomic b portedly are apt t level and

Basement

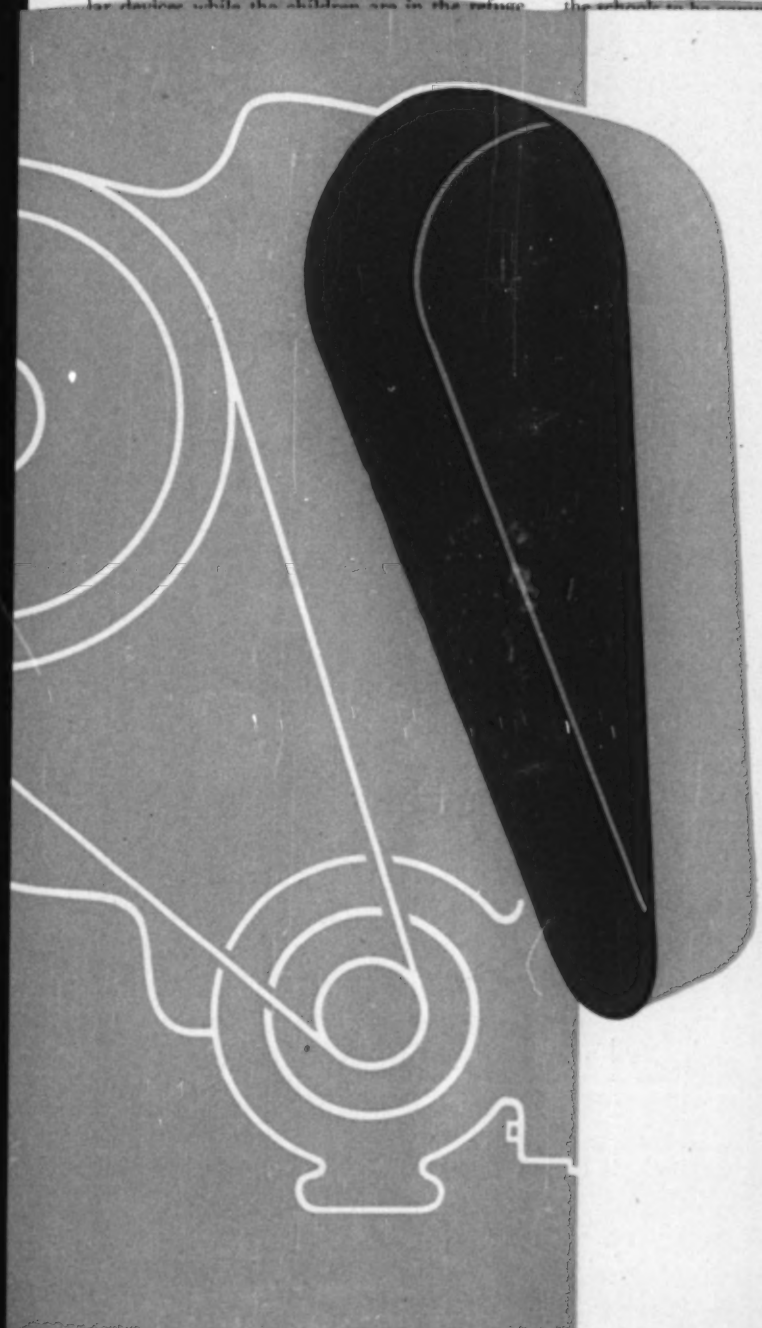
If this tive safet certainly available. probabilit handicaps despite th the debri begin to are the pr parts of areas mu

Questio of steam, pressure b engineers sure sufficiently in from five to seven minutes

to eliminate any danger from this source. Contrary to recommendations for homes, engineers [illegible] ranted fears, many schools have arranged for

the singing of songs, the telling of stories, the playing of records and the using of other similar devices while the children are in the refuge

fense organizations in their community during this organizational stage rather than to wait for the schools to be [illegible]



the build-
by volun-
ttle knowl-
particular
in the in-
dings and
or us not
ctive role

plans are
and must
there are
of pupils
ions based
London,
possibility,
s, that it

red, it is
uld be by
imitations
any their

her would
d also act
o page 36

is teacher
[illegible] to the shelter.

total welfare is true concern

Learning Is Useless Unless Child Lives

by MARY McGINLEY

THE total welfare of children is the concern of every good school. Every child who enters school must be taught the principles of safety for the sake of his safety and well-being. Unless the child learns to preserve life and limb all other learning is of little avail.

The teachers in Jackson school, Allentown, Pennsylvania, believe that a good safety education program is one which is based on the needs of the child, of the school and of the community. They meet these needs through acquiring an understanding of the interests, abilities, characteristics and limitations of individual children. The needs of the school and of the community pose problems with definitely individual characteristics.

A text to serve all safety situations would be difficult to find. The environment itself will provide the most effective teaching materials. With adequate leadership and efficient direction children are capable of creating and writing much of the material needed to fit their own situations and to serve their own purposes. A school safety program is cooperative and continuous.

The location of Jackson school on a well-traveled city street within a block of a through highway poses a very decided traffic hazard. This situation was aggravated by the closing of the through highway for resurfacing, so that a continuous stream of traffic was detoured across the intersections which the children use.

The school safety patrol, unable to cope with the emergency, began to disintegrate. The failure of the patrol to carry out its full functions drew the ire and the exasperation of the police detailed to assist with the movement of traffic.

The immediate problem gave the teachers an opportunity to examine their safety program and to devise a way by which safety training could be so incorporated into the regular program of studies that it would not only enlarge the general safety education offering but also would assist in solving the increased traffic hazards.

Need Generates Learning

The best kind of curriculum development arose from the situation because the desire for improvement grew out of a distinct need.

In a series of noonday conferences in which the teachers, principal and the director of instruction participated, a plan was developed

MARY McGINLEY is principal of the Jackson school, Allentown, Pennsylvania.

and put into operation. Soon afterwards the children were brought into the planning and they assisted with further development of the project. How well these cooperative endeavors succeeded may be judged from the following summaries of teachers' reports.

In the first grade, the teacher realized that safety materials had to be introduced to her six-year-olds at levels which they could comprehend and which would be applicable to every child. Safety on the streets, going to and from school, became the core of their learning activities. The school serves a large territory which includes many danger spots. The children and the teacher decided to get a picture of the territory on paper.

Each Child a Participant

A simple map 18 by 24 inches was drawn on white newsprint and was ruled in 1-inch squares. Dangerous street corners were noted by the group as were traffic signals. Since it was the children's first experience with maps, large buildings and places of importance were marked.

Each child marked on the map the route he traveled going to and from school. Points of danger were noted for each child. The children spent a great deal of their spare time discussing the routes with their friends. An art lesson gave the children an opportunity to draw their conceptions of their paths to school. The class also took a short walk to the nearest traffic light to study its uses. When the safest route was determined the child's home was initialed.

In her report the teacher says: "I feel that the first graders have become extremely safety conscious. I have noticed that the children walking to and from school are more observant of traffic hazards. Their non-accident record for the year proves this. They often comment on the unsafe conduct they observe in other children."

Many Learning Experiences

In the second grade an invitation from the parents of a hospitalized child provided an interesting innovation. The child had been placed in a room on the ground floor. Other children could visit by standing on the sidewalk and by talking through the window. The trip was planned for the first sunny day.

Learning experiences included such things as crossing unprotected streets, the policeman's aid at main intersections, traffic lights, the number of blocks to be walked and their relationship to a mile and general behavior. This teacher was particularly alert at capitalizing on incidents similar to the one just related. She concludes her report with the statement: "As a result of these activities, I feel that the children have gained 'street sense' and 'safety sense' above the ordinary child."

Conversations about accidents in another second grade led to cataloguing the danger points in the classroom such as corners of desks, open windows and out-thrust feet and of unsafe practices in halls, on stairways and on the playground.

The follow-up discussions led to such questions as: "Are there fire extinguishers in our building? Where are they? Which stairway should we use in case of fire?"

A quick check by the teacher disclosed that few seven-year-olds knew anything about the extinguishers or knew the best way to leave the building in an emergency. The teacher and children measured the halls, located the extinguishers and studied the stairways and exits. The measurements were scaled and incorporated into a floor plan upon which the locations under discussion were plainly marked.

The exercise provided concrete teaching material for some arithmetic lessons.

Accentuate the Positive

This teacher closed her report with the following: "I believe this unit on safety taught us consideration for others, cooperation with others and responsibility for others. It also gave us an opportunity to work with materials other than our basic reading and arithmetic.

"It helped develop the ability to think more clearly and to speak in positive sentences. Most children will state rules in the negative.

"We had to revise and learn to state our rules in positive phrasings."

As a result of their safety discussions, the children of the third grade decided to organize a safety club. With the assistance of their teacher, officers and committee chairmen were selected. Each chairman selected his own committee.

Every child had some work to do, either reading and editing rules, drawing pictures or assembling newspaper clippings. The committees produced booklets on: safety in halls, safety in fire drills, safety on the street, safety for bicycle riders, safety in the home and safety in science. This teacher concludes: "I feel that next year the children will want to produce additional booklets particularly on safety and health."

At Jackson school there are several grades of above average children. These pupils come from all over the city. The fourth grade teacher lists the problems very concisely:

"The various pupils of this group travel from one to six miles coming to school. Their ages range from seven to nine. Their homes and environments differ as much as east is distant from west. They come on foot, on bicycles, by automobiles, busses or taxis. The majority transfer to bus or streetcar in the business section of the city.

Needed Feeling of Security

"At the time the class was organized not more than two or three children had ever met before. So all of them need a feeling of security based on a safety consciousness which develops an alertness and an ability to meet emergencies intelligently and safely."

In this class, a committee made a daily survey to record accidents and their causes. At first they asked how many accidents had happened but later changed the question to inquire if it had been a safe day. During the year the accidents decreased in number. This decrease was plotted on a large graph. Graphs were also made by another committee which checked the floor, desk tops and cloakroom after dismissal for pencils, litter and cluttered books.

Many Pupil Activities

Each child depicted in any form he desired his safety experience during the Memorial Day vacation. One brought paper houses, small toy cars and two fire engines. He placed them upon a table in such a way as to show that when the fire bell rang all traffic pulled up to the curb giving fire engines the right of way. Another child made a paper house with a broken step which needed repairs. A girl pictured a rake with prongs pointed upward to show the danger of carelessly placed garden tools. A visitor to a large store drew an escalator, labeling it to show the safe way to use an escalator.

The outcomes of these fourth grade experiences as expressed by the teacher were: "We feel that through meeting these problems the child has won some security and has avoided developing a fear complex.

"The Memorial Day activities were instructive, varied, and gratifying. New experiences were met with confidence and safety."

The regular fourth grade investigated the building. Committees explored, as they called it, the basement, first, and second floors. After discussions, they charted the things that make a building a safe place. Were the halls well lighted for instance, were the stairways built of the proper materials. From outdoor play experiences they drew up lists of safe and dangerous ways to use the sliding board and other apparatus.

Summing up this work the teacher says: "I think I would use the same procedure to teach safety next year except that I would visit a large building, such as the Pennsylvania Power and Light Company office, with its safety unit. Other pupils might think as one of the boys did 'Do persons in other large buildings in town think about safety as much as we at Jackson school do?' "

Start School Paper

The fifth grade opportunity class, during a study of communication, discussed road signs and traffic signals. They realized that many young children are not able to read even the very simple traffic signs. So they decided to build small-scale replicas which could be used to teach safety in the primary grades of the school. Of course their own safety learnings were also being enriched. During the study of communications, several members of the class became acutely aware of newspapers. They suggested that we organize a school newspaper. Since the entire school was involved in an intensified safety education program, it was decided to use the paper as the medium in which each class reported and shared information on safety. In this way we related very concretely our safety work to our newspaper work.

All school subjects were correlated in this unit, spelling, reading, English, social studies, health and safety. Arithmetic was woven into the unit many times but most specifically when doing the signals and signs. Art played a large part in doing the illustrations, posters, graphs and charts.

In the other fifth grade each child made a graph which showed the frequency of accidents involving children at certain seasons of the year during 1948-49-50. The police department subsequently was furnished with this material. The children found the information and statistics in newspapers and other publications.

This class developed a very fine safety pledge: "I will work for the safety of others as I would want them to work for my safety. I will try to be careful at all times, everywhere. I will not take unnecessary chances and will warn others against doing so. I will do my part to help re-

duce the number of accidents this year, all this I will do for the sake of humanity and the honor of my school."

Outcomes reported by the teacher, include: improved daily dismissal; improved habits of carefulness; improvement in ability to read and spell.

Better Self Expression

The children also gained ability in expressing themselves clearly and interestingly in compositions. They were stimulated to write original rhymes. They showed skill and expression in drawings. And they gained additional experience in doing research.

When children reach the sixth grade they begin to be able to take care of others. We try to help them assume this responsibility by encouraging them to learn to meet emergencies intelligently and by helping them build attitudes of courtesy and thoughtfulness toward others. As a part of this attempt we reorganized the safety patrol, aiming to establish a closer relationship between classroom teaching and the childrens' acts.

Pupils, parents, police and the patrol must work cooperatively for the best functioning of this safety effort.

So that the parents would know what responsibilities the patrol is expected to assume, they were urged by the patrol members to attend a parent teacher association meeting where a police lieutenant, in charge of school traffic safety, would speak.

Name Liaison Pupils

So that the patrol members, themselves, would know what the police expected of them, the school principal, acting as their spokesman, invited the officers to attend patrol meetings there to instruct the patrol boys and girls.

So that the pupils would know what was expected of them the patrol members visited the various classrooms. And to help the individuals, not patrol members, feel some responsibility for patrol activity, the teachers were asked by the patrol to appoint representatives of the classroom who would attend patrol meetings acting as liaison agents between classrooms and patrols. Some of the reports written by these liaison agents were very revealing;

Patrols are too bossy.
We need more protection at the bus.
Patrols aren't always at their posts on time.
Patrols are doing good work.
Patrols are kind. We like them.
We saw the boys running to their posts.
The boys were playing with the flags and broke one.
Patrols are helping us to practice safety.
They talk too much.

The teacher concludes her report: "The outcomes of this adventure are most gratifying. We note a wonderful spirit of cooperation throughout the school. The patrol has developed a new respect for the traffic officers and what they stand for. There is much closer rapport between police and school. The group is more concerned for their own safety and for the safety of others. Best of all they have learned that working together is not only possible but is fun as well."

Retarded Children, Too

Jackson school has a special class of backward children which developed one of the most interesting projects of the entire safety education curriculum development.

At the start, the boys and girls worked on many projects but they all seemed to be too abstract, therefore, everyone started to look around for something more concrete. It wasn't long before an operating model of a traffic light was suggested. The teacher recognized the real value of such a traffic light so work on it commenced immediately. The first attempt at construction involved discarded desk tops but the model became too bulky and too hard to handle. After other unsuccessful attempts the teacher and the principal decided that this project should be completed by the high school vocational shop. Now the school is the proud possessor of a traffic light which will help teach children what each signal represents. At the same time the project is a source of great satisfaction to the special group who developed the idea, established the measurements, and made the initial design.

The Allentown school district course of study for elementary teachers does not list any safety activities for kindergarten. For first and second grades there is no set period for safety teaching but whenever a need arises time is taken. In the third and fourth grades one thirty minute period per week is alloted for safety education; in the fifth and sixth grades one thirty-five minute period per week.

The development of the curriculum activities project described in the foregoing paragraphs show that safety education can be an integral part of everyday living. The teachers of Jackson school have realized that safety education is

to page 37

"tops in cops," says milwaukee

Approve Women Guards For School Crossings

by B. L. CORBETT

"THEY'RE tops in cops," is Milwaukee's answer to the question of whether or not women can successfully replace the regular policeman as school crossing guards.

The skeptics said, in effect, "Oh, women may be all right when the sun is shining; when the drivers are patient, where the youngsters have been taught to mind, and at the quieter intersections.

"But how about it when it gets cold? When it's really raining? And where the traffic is really busy?"

Milwaukee's answer, after two years of cautious try-outs, is to increase the number of women employed as crossing guards.

During the past winter Milwaukee school crossing guards reported for duty and remained on the job while the thermometer registered 24° below zero. While other Milwaukee citizens spent every possible minute indoors to escape a record breaking winter (there were 21 days of below zero temperatures as compared with the average of only 13 such wintry days) not one guard failed to report for duty due to sub-zero temperatures!

How about the obstreperous driver, the occasional maverick who feels that he can't take a ticket from a woman?

There have been some cases in Milwaukee where school crossing guards have noted serious violations, hailed the motorist to the curb, called for the regular police and accompanied the

"Tops in cops." is Milwaukee's verdict when women replace police officers as school crossing guards.

B. L. CORBETT is executive director of the Milwaukee, Wis., Safety Commission.

police officers to headquarters where the school crossing guard swore out a warrant for the arrest of the violator.

There have been 100 per cent convictions in such cases.

The school crossing guard can get just as tough as the situation warrants. And why not when she knows that she has the unqualified support of the police department and the endorsement of the community.

Normal procedures, of course, are nowhere near so drastic. If a traffic violation is committed in the presence of a school crossing guard, she stops the motorist and issues a warning.

If the motorist fails to stop, the guard copies the license number of the violator and turns it in to the Safety Commission. The license number is checked and a form letter is sent to the owner of the car calling his attention to the violation and asking his cooperation in protecting the lives of school children.

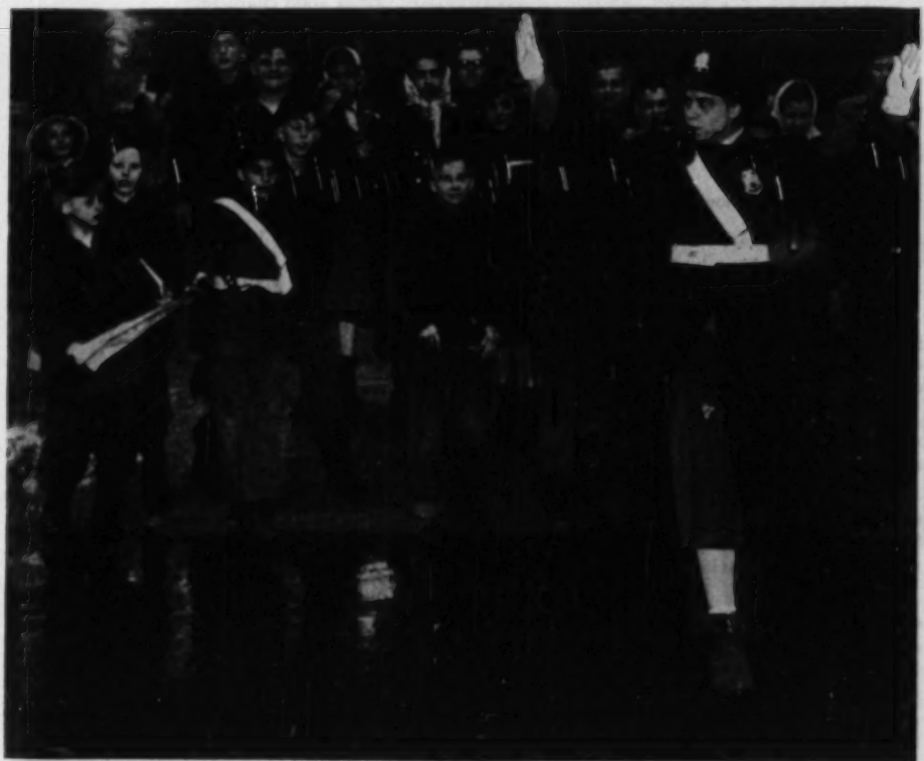
So that the reader may not gain a wrong impression, it must be stated and re-stated that violations are the exception. The presence of the sprucely uniformed woman, interposing herself between the traffic stream and the group of school children, is all that is required with the vast majority of motorists.

The fact that not one child has been injured at a crossing controlled by a woman guard is the irrefutable answer.

The Milwaukee try-outs were inaugurated after school principals, parent-teacher associations and other interested persons had imposed almost impossible demands for school crossing guards on the Milwaukee police department.

Every community, regardless of its size, is concerned with the problem of providing protection for children in crossing streets on their way to and from school.

In the average American city the police department has been given the job of providing this protection and has had to maneuver the



Stationed at one of busiest truck routes in Milwaukee, this crossing guard has won the respect of truck drivers, citizens, and municipal and school officials by being on duty every day despite wet, cold or heat.

working hours of its regular force, sometimes adding extra manpower, in an endeavor to cover the most important intersections during school opening and closing hours.

The police department never seems to have a large enough force to care for all the requests which emanate from local officials, parents and parent teacher groups as well as school officials.

Although Milwaukee's school child safety record has been excellent, the increasing number of automobiles and the alarming increase in traffic accidents demanded that additional protection be provided for the thousands of school children who are forced to cross the busy traffic arteries.

This Is the Problem

Milwaukee has 173 elementary schools.

Milwaukee school children cross 512 major street intersections going to and from school.

Automatic signals protect 80 of these crossings. School safety patrols alone protected 286 of them. Police officers were assigned to 110.

With police work becoming more and more professionalized and police training becoming more extensive, each experienced policeman represents an increasingly large community investment.

The question asked by the Milwaukee Safety Commission was:

These Are the Questions

"Are the skills of our highly trained policemen being used most advantageously when they are assigned to guard school crossings?

"Are the admittedly high costs, incurred when police guard school crossings, preventing the community from giving adequate protection to our children?

"Is the community attaining the high measure of police protection for which our officers are trained?"

It was in an attempt to give satisfactory answers to these questions that the Milwaukee Safety Commission recommended the employment of women as school crossing guards.

After an extensive study, the qualifications desired were enumerated, the duties were suggested and a training program was outlined. Even so, it was only after considerable debate that the Common Council, our local governing organization, authorized the hiring of 75 women for the job.

It is significant that almost exactly half of the applicants failed to pass the preliminary examination. We wanted, and were determined to secure, competent personnel.

To pass the test the applicants were required:

(a) to be a citizen;
(b) to be a resident of the city;
(c) to be in good physical condition;

This was interpreted to mean that they:

must be not less than 5′ 2″ tall;

not more than 15 percent heavier than the standard weight recommended by the American Medical Association; have no major physical defects;

have good vision and hearing;

be reasonably quick in reaction;

be able to work outdoors in all kinds of weather for periods of time as established by the Milwaukee Safety Commission and the Milwaukee Police Department;

take and pass a physical test annually, such test to include examination of the heart, eyesight, hearing, blood pressure, a search for symptoms of arthritis, hernia, etc.

(d) have completed two years of high school;
(e) be of good character;
(f) have a friendly personality.

Attend Police School

Those applicants who met the qualifying physical and personal tests and who passed the general test given all civil service employes were then given an intensive week's work at the Milwaukee Police Training school and then re-examined.

The women are equipped with uniform caps, white Sam Browne belts, uniform overcoats, standard police badges and whistles. They are paid $1 an hour, $3 a day for a shift broken into three parts (1) before school (2) at noon and (3) after school.

The cooperation of the public was excellent and it immediately became apparent that the woman school crossing guard was here to stay.

This was in the fall of 1949.

After the first year's work had been completed, John W. Polcyn, chief of police, reported to the Common Council:

"After careful observation of the conduct and work of the women . . . it was apparent that they were doing an excellent job of safeguarding school children. . . .

"Many comments have been received respecting the work of these school crossing guards . . . and it appears without doubt that the employ-

to page 39

Minnesota Youngsters Take Patrol Pledge

Minnesota pupils in their own schools (above) are sworn in as safety patrol members by Gov. C. Elmer Anderson (left) in state-wide ceremonies broadcast from Minneapolis. Photos courtesy Station WCTN.

MORE THAN 20,000 Minnesota youngsters were "sworn in" as safety patrol members by Governor C. Elmer Anderson in a state-wide ceremony which was both broadcast and telecast from the Minnesota State Fair Grounds.

Between 6,000 and 7,000 members of the school safety patrols were present at the ceremonies. The remaining 13,000 to 14,000 participated by means of radio and television receivers in their local schoolrooms.

Cooperating in this unusual safety promotion project was Station WCTN and WCTN-TV and a state-wide network of 22 Minnesota broadcasters.

Participation of both public and parochial schools was gained through the sponsorship of the Minnesota State Department of Education, the Minnesota Safety Council, the Minnesota Automobile Association, the state highway department and the American Legion.

erie schools find

Safety Week a Tool to Get Cooperation

by E. R. ABRAMOSKI

Teaching pupils how to stay alive, whole and healthy is a year around program in the Erie, Pennsylvania, school system. But to focus the attention of the community on the importance of never letting up in the campaign, it was decided, last spring, to have a Safety Week.

Each school worked out its own individual program with its own initiative.

At Emerson Elementary, where Grace A. Nunn is principal, two assemblies were held, one for the kindergarten through sixth grade classes and the other for the intermediate group. Stories, safety rules, safety pictures, safety poems, projects such as "A Safe Community" were classroom activities. The intermediate group pupils formulated and adopted a "Code of Good Bus Behavior."

Two pupils of Academy High, who are also members of the Pennsylvania State Park Life Guards, demonstrate the Shafer method of resuscitation.

When she violated an Academy High School traffic regulation this pupil was haled into court.

Special recognition was given, in the assembly, to the pupil members of the safety patrol, safety squad and monitors.

"S" for Safety really took precedence over the "three R's" at Academy High. Under the direction of a faculty committee composed of Maria M. Weschler, Mary Walker, George McLean, Michael Ferrare and Frank Pettinato the school made a major effort to pin-point attention on safety.

Exhibits on safety in the woods, safety in the water, safety in fire and firearms and safety in sports were put on display in cases throughout the halls by one of the science classes.

MR. ABRAMOSKI is director of health and safety for the school district of the city of Erie, Pa. Four Erie schools are two-time winners of the Honor Roll awards of the National Safety Council.

The Driver Education and Art classes made posters and streamers for the halls and cafeteria. They were also responsible for the bulletin boards describing bicycle and traffic safety.

The Driver Education class took over traffic safety in the school building. White directional lines were painted on the hall floors; inspection tags, shaped like a keystone and bearing a slogan, were distributed to everyone in the school on Monday morning to be worn throughout the week.

Traffic tickets were issued by class members acting as patrol officers and a Traffic Court was held Friday afternoon with William McKinley, a city traffic policeman in charge of school safety, acting as judge.

Pupils guilty of traffic violations were "sentenced" to write essays on their violations. The essays were read in the guidance period the following Monday and were checked by the homeroom teacher.

The safety committee of the Student Senate was responsible for cartoon and safety slogans on classroom blackboards.

Two assemblies were held. At the first a Civilian Defense movie, *Atomic Alert,* was shown and Mr. Ferrare, safety director of the school, stated the purposes of the week-long program.

The second assembly was addressed by members of the Pennsylvania State Police who also held a question and answer session. Three Academy High boys, who are also members of the Pennsylvania State Park Life Guards, demonstrated the approved method of resuscitation.

During the week some 350 boys were given the American Red Cross swimming test. Girls in the life saving classes demonstrated the correct ways of handling overturned canoes and using surfboards as rescue tools. Nearly 500 pupils had chest x-rays.

All the available community resources were used.

The American Red Cross, the Anti-tuberculosis Society, the local and state police and, of course, the Erie Safety Council all can be tools with which we in the school system can teach our pupils how to stay alive, whole and healthy.

An Academy High pupil, "convicted" of using the wrong traffic lane on the stairs, explains his confusion in this essay, the writing of which was the penalty for his offense.

The Danger of Going *Up* or *Down* the Wrong Lane

The danger of going *up* the *down* stairs, is that if you are going *up* the *down* stairs, someone may be going *down* the *down* stairs, when someone is going *up* the *down* stairs.

Chances are, that the person who is going *up* the *down* stairs, and the person who is coming *down* the *down* stairs may collide, and someone may get seriously hurt.

The danger of going *down* the *up* stairs has the same dangers as anyone going *up* the *down* stairs.

Whether there is anyone around when you are walking through the halls in school, or any place you happen to be, you should always remember the rules someone has taken time and patience to set up for you, and every citizen in the whole wide world.

Surfboards are tools, not only for fun but also potentially for water rescue. The technique taught in the Life Saving class at Academy High is shown here. (All photos by Academy High pupils.)

now nearing seasonal peak

Gun Accidents Claimed 2,350 Victims Last Year

If you are going to be killed in a firearm accident, the chances are greater that it will happen this month than in any other month. The seasonal distribution of fatal firearm accidents swings from a low in March, April and May to a peak in November. About 15 per cent of all fatal firearm accidents occur this month, according to the National Office of Vital Statistics.

It is utterly ridiculous that anyone should be accidentally killed with a lethal weapon, barring defects. Yet 2,350 persons were accidentally killed by guns last year. It was 2,400 in 1913, it was 3,000 in 1933, it was 2,300 in 1943.

In home accidents last year (home being defined as the house and grounds used for residential purposes) more 15 to 24 year olds were killed by firearms than by any other kind of accident. Firearms were the third leading cause of ALL accidental deaths in the 10 to 14 and in the 15 to 19 year age groups for the years 1948, 1947, 1946 and 1941. These were the latest years, barring war years, for which a breakdown was available when the National Safety Council study was made.

In home accidents last year, 1,300 persons were accidentally killed with firearms. This is an increase of eight per cent in the number of deaths and an increase of six per cent in the rate over the previous year.

Approximately 1,000 persons were killed last year in public or pseudo-public firearm accidents. These are the persons killed by their hunting partners, persons who pulled a loaded gun through a fence muzzle first, persons who carried a loaded weapon in a dangerous position or who put their loaded guns in their cars, or persons who were hit when someone else was target shooting or "showing off" with a gun.

The Metropolitan Life Insurance Company published in their October, 1948, Statistical Bulletin a study of death claim records of 250 of a select group of policy holders who had died from firearm accidents in the two previous years.

It should be emphasized that this was largely an urban group.

Virtually half the victims were killed in home accidents. One-fourth died in hunting accidents. About two-fifths were children under 15 and these were largely in the 10 to 14 year group.

The mere handling, exhibiting or examining of guns was responsible for about one-eighth of the deaths. Some persons were killed after they had brushed against or moved a weapon which had been stored behind a door or a bed.

Hunters have more to fear from the guns of their associates than from their own weapons according to this study. More than two-thirds of the hunting victims were shot by associates.

Sixty of the study's 250 deaths were non-hunting, in public places.

Shooting at bottles, tin cans and other targets took about eight per cent of the lives. Accidents in bars, cafes, stores where the guns were being "shown off" took an equal number.

In the Metropolitan's study, rifles and shotguns were the weapons in somewhat more than three-fifths of the cases.

The accumulation of statistics as an end in itself is a game for mathematicians. The accumulation of statistics as a tool for life saving is a goal in safety education. Knowing how the 2,350 persons died, it should be possible to find methods of reducing the loss.

safety education data sheet–

No. 57

Safety in the Auto Shop

THE PROBLEM

1. Numerous attempts have been made to determine which of the school shops are the more hazardous. Generally speaking, the automobile mechanics' shop ranks third in frequency of accidents. It is exceeded by the wood shop and the machine shop.

However school shop accident statistics are based on frequency alone. Both the wood shop and the machine shop have considerably higher enrollments. So if exposure were taken into account, the accident rate of the auto shop would not be very favorable.

GENERAL

2. Learn how to lift safely, that is, with the legs—not the back. Ask the instructor if you do not know how to lift safely.

3. One school has designated all shops as "100 per cent eye protection areas," meaning that everyone who uses the shop must wear eye

Good practice in the auto shop. Notice the uncluttered floor, the flexible metal hose to keep exhaust fumes out of the shop, the stable jacks so positioned that the car cannot tip, the automatic sprinkler overhead, the round-bottomed bucket of sand for fire extinction, the fact that no one is in the car while the pupil-mechanic is beneath. All photos courtesy the Chicago Board of Education.

protection equipment. Wear safety goggles on any job where the eyes are endangered such as when sand-blasting spark plugs, grinding or chipping, using compressed air, working underneath cars, operating power machinery, doing abrasive disk or drum operations. Chemical or splash-proof goggles and a face shield should be worn during battery charging operations or when boiling out or testing radiators for leaks.

4. Use only extension cords and sockets that are in good condition. Portable light bulbs should be protected by a rubber- or neoprene-covered steel guard. Ground all portable lights with a third wire. And do not place cords or wires where they may become a tripping hazard. **Don't use any portable electric tools unless they are electrically grounded with a third wire.** Be sure the extension cables on portable electric tools are in good condition.

Belt guards for the power-driven tools, labeled board for the hand tools, no oil puddles on the floor, —indications of a safe auto shop.

5. Do not attempt the use of any power tools or equipment in the auto shop until the proper and safe use has been fully explained by your instructor. Always use the proper tool for the job. Be sure transmission guards and point of operation guards are in place before using power machinery. Do not use defective tools. Mushroomed chisels and drift pins, hammers with broken handles, defective screw drivers, spread wrenches and greasy tools can all be the cause of serious accidents. Keep all tools clean and free from grease.

6. Never engage in horseplay of any kind in the auto shop. This includes, running, scuffling, throwing tools or materials.

7. Never use compressed air except for the purpose for which it is intended. Horseplay with compressed air equipment or dusting off clothing or work benches with compressed air is extremely dangerous. Flying particles of metal or glass may be blown into the eyes or the skin. Also, compressed air blown into the skin or body openings can cause serious injury and even death.

8. Do not place any tools or materials on top of equipment and, before going under a car or engine, be sure that there are no loose objects on engine or fenders.

9. Before working under cars, close car doors. Use a creeper or dolly when working under cars and keep legs clear of passageways. Don't leave creepers where anyone can step on, or trip over, them.

10. Don't work on the top side of a car when someone is working underneath.

11. Avoid contact with hot manifolds, exhaust pipes, etc.

12. Never remove the cap from a radiator when the coolant is boiling.

13. Engines should not be operated except under immediate supervision of instructor and then *only* if the shop is equipped for removing combustion fumes. When starting engine, *don't* pour gasoline in carburetor throat. Before starting, check to see that car is out of gear.

14. Be especially cautious around moving parts, such as flywheel, fan blades and belt, gears and generator pulley. Keep sleeves rolled up when working with *any* moving machinery. Don't oil engine while it is running, and do not attempt to wipe moving parts of engine. Keep hands out of door jambs.

15. Do not use the mouth to start a siphon from the gasoline tank. Gasoline often contains poisonous tetraethyl lead.

16. Handle brake fluid carefully so it does not splash into eyes.

17. To avoid burns from accidental short-circuits and to prevent accidental engagement of the starting motor, be sure to disconnect grounded battery cable and insulate connection before working on power plant of car.

18. Never consider a job complete until check has been made to make sure all lock washers, cotter pins or other locking devices are in place. Be sure cotter pin ends are not protruding to cause scratches.

19. Wear gloves when removing jagged pieces of glass from car windows or windshield. Be alert for danger of breakage when removing bulbs and lenses from car lights.

Metal-working shops can be kept as clean as any other division of the auto shop. Good housekeeping is an important factor in making an auto shop safe.

20. Wipe up at once any spilled oil and grease or other liquids. They are slipping hazards. Use oil absorbent materials on the oily spots.

21. Wear safety shoes.

22. Report all conditions that seem dangerous to instructor and report any injury immediately. Have all injuries treated at once.

FIRE

23. Never smoke, use open flames or strike sparks in a room where flammable liquids are used or stored.

24. Keep only working quantities of gasoline on hand. Use only approved safety cans for storage and be sure all containers are properly labeled. Keep containers tightly closed when not in use. Store all flammable liquids in an approved fireproof room or in fireproof cabinets.

25. Don't run a motor above idling speed if float bowl cover is removed. Gasoline may splash on hot motor and cause fire.

26. Avoid placing live wires near fuel lines, carburetor or gas tank. Before starting engine make certain that engine is properly timed (to avoid backfire), that there are no short circuits, that all electrical connections are in order, and that there are no leaks in tank or fuel line connections.

27. Sparks from static electricity are an ever-present hazard when you pour or pump gasoline from one container to another. So be sure that the dispenser is grounded to the receiving vessel and to ground.

28. Use kerosene—or commercial non-flammable cleaner, not gasoline—for cleaning tools, machine parts, etc.

29. Do not wash hands or arms in gasoline. Use a mild soap or special hand cleanser.

30. Change any oil- or gasoline-soaked clothes immediately. A spark, a hot exhaust manifold or an open flame can easily ignite such clothing.

31. Learn location and use of various fire extinguishers for each type of fire.

32. Dispose of oil- or gasoline-soaked rags, waste, etc. and other debris in self-closing air-tight metal cans provided for this purpose. Empty the cans and burn the contents in a suitable place each day.

33. Keep flames and sparks away from all explosive vapors. This includes hydrogen from storage batteries and anti-freeze solution vapor.

LIFTING DEVICES

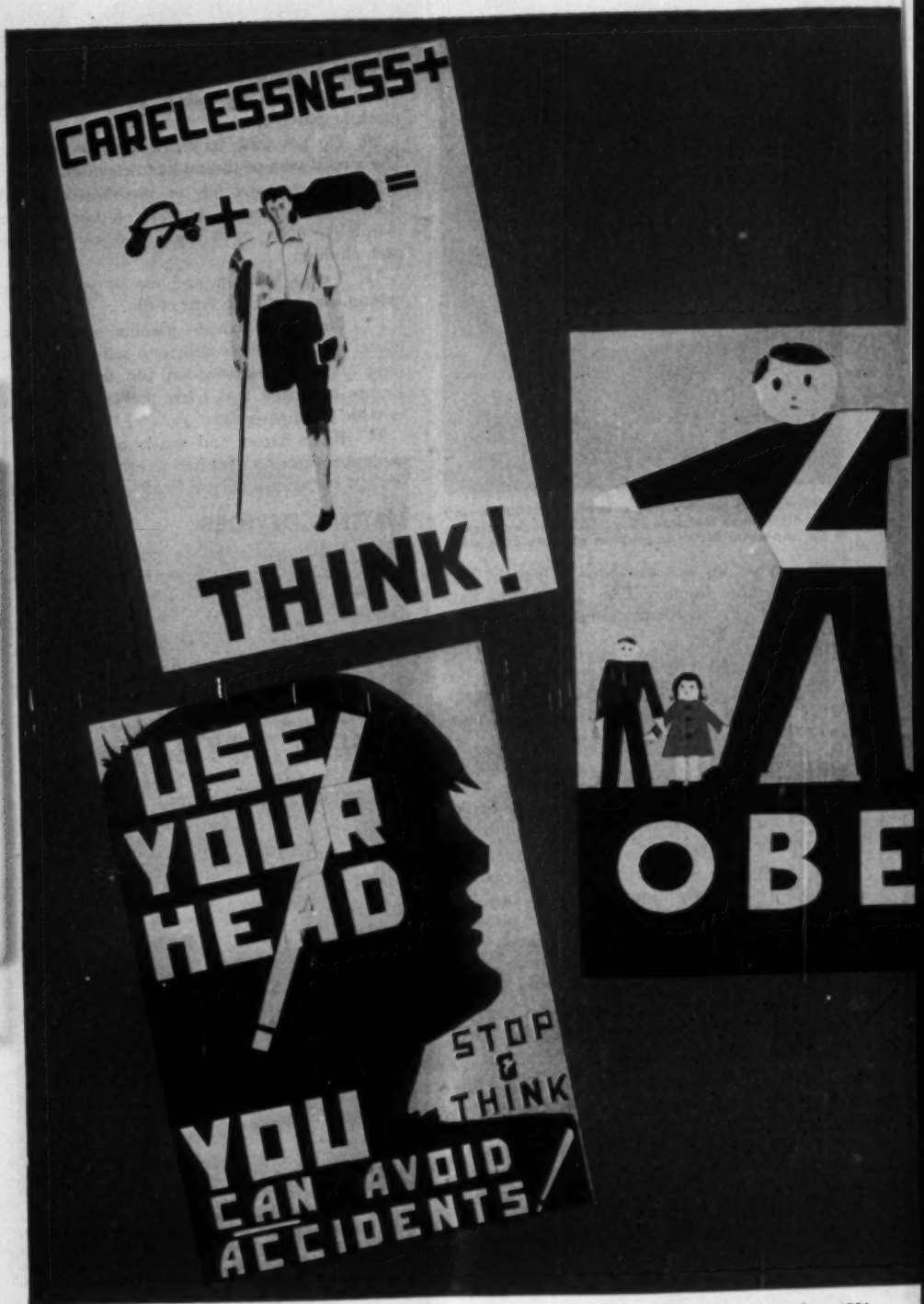
34. Fasten chain hoists securely and don't overload chain slings. Inspect chain hoist before use and test by first lifting only a short distance.

35. Don't use a jack if there is any doubt about its safe operating condition.

to page 22

How NOT to Do It!

Too often would this practice be considered satisfactory. In this specially posed picture a casual observation will disclose at least six hazardous operations or situations: Sleeves, ring, no goggles, splintered kneeling board, tangled extension cord, dropped tool.


CARELESSNESS+
=
THINK!
USE YOUR HEAD
STOP & THINK
YOU CAN AVOID ACCIDENTS!
OBE

For three successive years the pupils and faculty of McKinley Vocational High School, Buffalo, New York, have won the Honor Roll awarded by the National Safety Council which is given for exceptional effort in safety. The posters on these two pages were a part of the exhibit sent by the school to the honor roll judges as a claim for the award. The posters were considered meritorious not only for the editorial content but also for their craftsmanship.

Data Sheet

from page 19

36. Block wheels before jacking up car and when two wheels are off floor, block other wheels.

37. Always use blocks or horses to support car. Don't depend on jack or chain hoist alone. Lifting jacks should be wheel-centered before making lift.

38. Never lift or lower (jack up) car if someone is working underneath it.

39. Turn or remove jack handles so no one can trip over them.

40. Don't lean over a jack handle or handle socket under load.

41. Operate hydraulic, pneumatic or electric power car lifts strictly according to manufacturer's instructions, and do not raise weights beyond rated capacity of lift. If you do not know this information, ask the instructor before operating lift.

42. Before car is raised on a drive-on type lift, set brakes; block the wheels; and check to see that car is not in gear.

43. Never rock the lift unless lift is designed for that purpose.

44. Use all safety devices provided on lift and see that everyone is in the clear before lowering lift.

GREASE RACKS

45. Keep floor clean of oil and grease to prevent slipping.

46. Keep hands away from sharp or rough edges on vehicle.

47. Don't put hands in front of grease gun nozzle when handle is pulled. High pressure grease guns can force grease under the skin.

48. Screw or clamp tops of grease cylinders in place with great care. Serious injuries can be caused by blown-off covers.

49. Be careful not to inhale sprayed or atomized oil. Stand clear until the oil settles; because of its heaviness oil settles rapidly. Do not direct oil spray toward other workers.

50. Exercise caution when rocking a car to make grease penetrate frozen bearings or stiff springs. Do not use a lifting or pushing motion.

WELDING

51. When arc welding, wear clothing and welding helmet that completely protects body and eyes from rays of arc, hot metal and sparks.

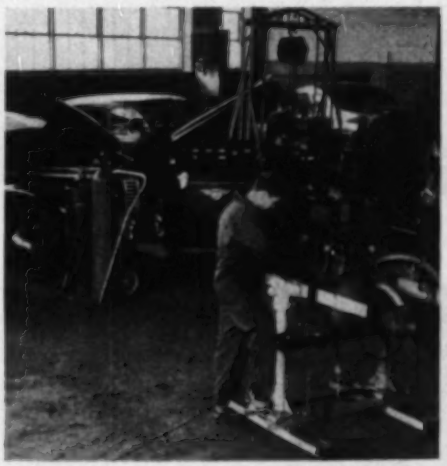
52. Wear protective colored glass welder's goggles and helmet approved by the American Standard Safety code for gas and electric welding.

53. Welding operations (See Data Sheet No. 56, Welding and Cutting Safely) should not be conducted in the same room with spray painting operations or where gasoline, kerosene or other flammable materials are exposed.

54. Surround electric arc welding operations with a shield at least six feet high. Persons working nearby, not protected by shields, should wear protective goggles.

55. Before welding or brazing a leaky gasoline tank (1) remove it from the car; (2) steam it until all the gasoline has been evaporated (experts recommend a minimum of two hours steaming, many advise four hours); (3) fill the tank with an inert gas, carbon dioxide is acceptable, or fill it almost to the rupture with water, providing a vent for the escaping steam. Get the instructor's approval after this has been done and before starting the weld.

56. Always check with instructor before welding on car frame near gas tank, carburetor and gas lines. Since there are no set rules for welding operations in this area, the instructor will issue safety rules consistent with existing conditions.



The floor is clean, the motor on the frame has an exhaust outlet, the welder is wearing goggles, the chain hoist is sturdy.

57. Never use oil *in even the smallest quantities on oxy-acetylene equipment.* Oil in the presence of oxygen may ignite spontaneously. Don't use an oxy-acetylene set near oil or grease on motor vehicle parts, and clean hands of oil or grease before welding.

58. Always, during welding and cutting operations, have a fire extinguisher standing by.

SPRAY PAINTING

59. Spray painting should never be conducted within 30 feet of persons smoking or other ignition sources, such as welding or brazing operations. Spraying should be done in a spray booth with exhaust system.

60. Anyone spray painting must wear an approved-type respirator.

61. Do not use sprayer unless exhaust system is in operation.

62. To avoid possible sparks, use a non-ferrous scraper for removing dried paint from sides, floor and roof of spray booth.

63. Never point spray gun at fellow-workers.

64. When hand rubbing spray paint coats, wear synthetic rubber gloves and hand pads if kerosene is used as a lubricant. Hand pads are sufficient when water is used as a lubricant.

65. Do not clean hands with spray paint thinners.

BATTERY HANDLING

66. Get help when lifting large batteries. Don't hold battery in your arms. Use battery strap or carrier. Always hold battery upright so there is no danger of spilling acid.

67. Disconnect ground cable first when removing battery from car and connect ground cable last when installing battery. Don't install a battery while it's gassing.

68. Don't short circuit battery to test it, and, if there is a short circuit, do not touch shorted wire with bare hands. Tools or other metal should not be placed on top of battery. A short circuit and possibly a fire may result.

Generator test panel. Notice that the motor, driving the generator, has a sturdy belt guard. The double knife-blade switch is for polarity.

BATTERY CHARGING

69. Never smoke or use open flame in a battery charging room.

70. Since danger of acid burns is the principal hazard in battery charging operations, wear proper protective clothing. Chemical goggles, rubber aprons, gloves and boots are the best protection. Wear the gloves, boots and apron during actual refilling operations. Wear goggles whenever working around batteries. When testing batteries, keep eyes away from vents.

71. Follow closely manufacturer's recommendations for charging rates of various size batteries. Take all possible precautions to avoid short circuits while batteries are being charged. A short circuit could be the cause of serious burns or the explosion of accumulated hydrogen.

72. Handle acid carboys with care and flush any acid burns with plenty of cold water. Use standard mounting frames for holding carboys to make pouring safer.

73. Always pour acid into water and *not* water into acid when mixing battery solutions.

TIRE OPERATIONS

74. Be sure pressure gauges are working properly and never face the tire being inflated. Excessive pressure or structural defects may cause tire to explode, causing serious injury.

75. Don't lift heavy tires. Get help or use mechanical lifting devices.

76. Keep rubber cement and flammable solvents for patching tubes or filling tire cuts in safety cans.

77. Wear goggles when using power driven rasps or scrapers for tires or tubes.

SOURCES

AUTOMOBILE MECHANICS FOR VOCATIONAL HIGH SCHOOLS—*Syllabus.* 187 pp. Brooklyn, N. Y.: Board of Education of the City of New York. 1948-49 Series.

GARAGE AND REPAIR SHOP SAFETY. *Fleet Safety Manual Part VII.* 12 pp. Illustrated. Chicago, Ill.: National Safety Council.

GARAGES AND REPAIR SHOPS. *Industrial Safety Series Pamphlet No. D-6.* 14 pp. Illustrated. Chicago, Ill.: National Safety Council.

JACK UP SAFETY. C. M. Hewitt. 3 pp. Illustrated. *SAFETY EDUCATION* reprint. Chicago, Ill.: School and College Division, National Safety Council.

SAFETY INSTRUCTION CARDS. Chicago, Ill.: National Safety Council.

Flammable Liquids—No. 226
Garage Mechanics—No. 82
Lifting With Jacks—No. 93
Spray Coating—No. 227

SCHOOL SHOP SAFETY MANUAL. 240 pp. Brooklyn, N. Y.: Board of Education of the City of New York. 1948.

SHOP SAFETY EDUCATION. The State Education Department. 319 pp. Illustrated. Albany, N. Y.: The University of the State of New York. 1949.

texas school trustee says

Pupil-Teachers Do Well In Driver Education

by J. B. FRICHTMAN

THE PLAN of teaching driver education in the Port Neches (Texas) schools is in most respects no different than the plan used by other Texas schools. But, by the use of advanced pupils as behind-the-wheel teachers, we have found a way to:

(1) Reduce the cost of driver education to a point where the course is comparable in cost with other high school courses. And

(2) Arrange the available car time so that every pupil enrolled has adequate behind-the-wheel training under proper supervision. And

(3) Cut, drastically, the natural tendency of young adolescents to show off.

The course lasts one-half year and is offered to students in the tenth, eleventh and twelfth grades. There is a course of study furnished by the Texas Education Agency for our guidance.

This course of study was developed in a teachers' workshop at the University of Texas in 1945 and was revised in 1950. It is geared to a Texas statute, passed in 1945, which permits the Texas Department of Public Safety to issue drivers' licenses to those students above fourteen years of age who have successfully completed the driver education program.

According to Texas Education Agency reports, approximately one-half of all Texas schools are offering some sort of driver education and road training. There were scarcely any schools prior to 1944 which made any attempt at safety education.

The Port Neches high school has about five hundred pupils in grades ten, eleven and twelve. Most of these students come from families whose breadwinners are employed in the local synthetic rubber plant, chemical and refining industries.

The program each year reaches seventy to one-hundred students. Class enrollment averages twenty to twenty-eight students. It will be seen that within three years approximately seventy percent of all students will receive formal driver education sometime during their high school career. Other accident prevention education is carried on in connection with other classes, of course. However, it is not connected with the problem which I am to discuss.

In the Port Neches teaching plan the time allotment includes nine weeks of theory during which the instructor uses such teaching aids as mock-ups, demonstrations, visual aids, traffic surveys and other class projects which serve to familiarize the students with the fundamentals of safety education. Special emphasis is placed upon the skillful use of the automobile.

We are told by our teachers that youngsters are impelled by the show-off desire and that this may be used to advantage in developing skills and correct traffic behavior on the part of their students.

Unfortunately this is not completely successful.

For the past six years the Port Neches schools have used a driver education car with standard dual driving devices recommended by the Amer-

J. B. FRICHTMAN is president of the board of trustees, Port Neches, Texas, public school system.

ican Automobile Association. This vehicle has made the difference between a strictly theoretical course and a life-saving, practical one.

The last portion of the program is devoted to behind-the-wheel training. This involves scheduling of road training between the instructor and all students which will provide behind-the-wheel training for each student.

It has been noted that students require different amounts of road training in preparing them for taking the license test and for correct driving behavior. The amount of road training needed for each student varies to a great extent because of the temperament and previous experience of the student. Most school people know more about that part of the problem than I do; however, it is essential that each student be given adequate behind-the-wheel training prior to allowing him to get on the highway.

Teacher's Time Is Costly

The problem of adequately preparing the student for actual driving, therefore, has become a very important and time consuming factor in the safety education program. Paid teacher time for behind-the-wheel training is a very expensive item and for this reason discourages many communities from carrying on the driver education program as it should be carried on. It may result in abandoning the road training or in de-emphasizing it due to lack of teacher time. Many of our students found it difficult to arrange their schedules to conform with those of the instructor; thus some students were more favored in their road training program than others.

Valuable to Pupils

It was for this reason that consideration was given to the use of student assistants.

This seemed to be a logical solution to the problem if we were sincere in our claim to citizenship training.

As mentioned before, one major motivating factor in deciding to use students was to save teacher time. Another advantage apparent to school officials, in the use of student assistants, was that a premium was placed upon driving skill among the students. It gave responsibility to students who merited it and placed great emphasis on good driving habits.

The use of student assistants was begun in 1948. Junior and senior students were selected. Up until the present time only boys have been selected.

The following factors were considered in their selection:

1. Prior performances as a member of the driver education class.
2. General sense of responsibility to the total school program.
3. General intelligence and understanding.
4. History as a good citizen and prestige in the school and community.
5. Ability to command respect of other students.
6. Ability to get along with other people.
7. Interest and desire to be of service with no reimbursement.

These students are chosen at the beginning of each semester. A maximum of four per semester has met our needs. After the students have been selected, these steps are usually followed:

They are given special training by the driver training education instructor who works very closely with them discussing the fine points of road training and outlining their general responsibility.

The Examining Division of the Department of Public Safety assists in giving these student helpers advice as needed.

Instructor Is Coordinator

Student helpers are required to spend the first nine weeks with the teacher in the theory course, serving as assistants and performing minor duties in connection with the instructional program.

During the road training program, students are scheduled in groups of two or more to receive instructions and practice in backing, parallel parking and road training under the supervision of the student helpers.

The instructor serves mainly as a coordinator of the program, scheduling students for road training during the regular class period, study hall time or after school hours, receiving reports from the assistants on students under their supervision and giving special aid where needed.

No criteria has been established to evaluate the results of the student assistants. Some results were clearly apparent however:

In the first place the recognition of the students who were chosen had a desirable effect upon the other students in the school. When the emphasis was placed upon skill, students who normally received recognition by being show-offs began to receive discouragement from the other students. It was not quite so popular to be reckless. Certainly not all of the reckless driving among high school students has been discontinued but the high school officials think that the student assistants' program has been a

to page 40

Is He a Tattle-tale or Brother's Keeper

by VIVIAN WEEDON

IT WAS most unkind of that British train to wreck itself at Weedon Station when I have given the best years of my life to making "Weedon" and "Safety" synonomous.

I should suspect a foul international plot were it not for the fact that a hundred percent red-blooded American train, last August, defiled not only the name but the body.

The situation was this: As representative of the National Safety Counell, I was on my way to Fredericksburg, Virginia, to attend a conference on safety education at the elementary level called by the National Commission on Safety Education of the National Education Association. Standing at the station, surrounded by my bags, I was a model of decorum (I might even have been posing for "The Safe Way to Wait for a Train.") when suddenly an express train thundered down the track showering me with nice, shiny, hard coal, a piece of which landed on my shapely ankle and shattered to bits.

As I limped the remaining miles to Fredericksburg I pondered again the ancient truth: We are, in fact, our brothers' keepers, or to paraphrase the old quotation, "One is only as safe as his most careless neighbor."

But how do you teach a child to be his "brother's keeper" without producing a tattletale? That question has been asked of me by elementary teachers many times.

There is no simple answer. The child who consistently reports only matters which we ourselves think should be reported and who fails to report those which we think should not be reported is not a tattletale. But that is to describe the product rather than the steps of producing.

It seems to me that there are three or four fairly simple steps which an elementary teacher can take.

Put the emphasis on reporting the thing that is unsafe rather than the person. For example, "there is a window broken," rather than "Johnny broke a window."

Put emphasis on correcting unsafe conditions rather than reporting them. For example, rather than telling the teacher "Jane spilled the paint and didn't wipe it up" the child should be encouraged to wipe up the paint herself.

This calls attention to another factor. If we are going to encourage children to take time to make their environments safer we must, by the same token, allow enough time leeway to make it possible.

If we are going to insist on rigid time schedules we will find our pupils overlooking those little things they could do to make their environment safer.

If we find a child who comes under the category, in our thinking, of "tattletale" we need to seek deeper for the cause. What is it that the child lacks that makes it seek attention by running down others? How can we help him achieve success and satisfaction in a less objectionable way?

Finally, perhaps it is well for us to examine ourselves to find wherein the label "Tattletale" is so obnoxious.

Certainly for safety it would seem wise if more people "tattled" on the hazards in life.

VIVIAN WEEDON is curriculum consultant, School and College Division, National Safety Council.

November, 1951

Lower Elementary Safety Lesson Unit

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11, ILL.

Teaching language arts, social studies, physical education and safety

Sketch S9311A

Safety—Our American Heritage
PROTECTIVE DEVICES

A Story of Long Ago

This colonial boy is carrying a wild turkey which his father shot for their dinner. They are on their way home. They are very careful not to get lost in the forest.

Their home is inside a tall fence or stockade. This stockade helps to keep out wild animals and enemies. Sometimes this boy climbs to the corner tower where he helps keep watch.

Children play inside the stockade. The gates are closed every night for protection.

Today we do not use stockades. We have other ways of protecting ourselves. But safety is just as important as it was long ago.

To Talk About

1. What protection can you wear on a dark rainy day?

2. When you hike what protection should you have from bites?

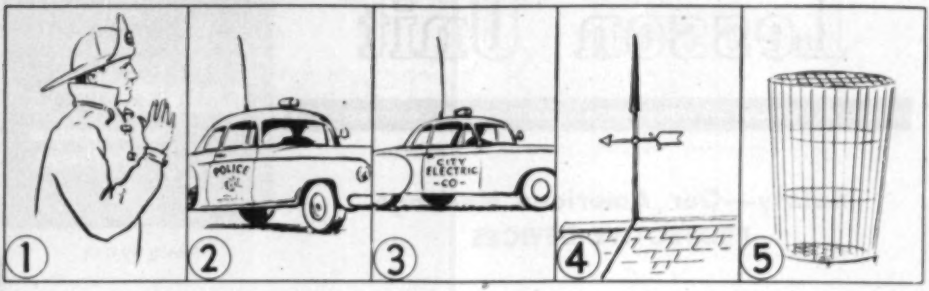
3. What protection is a coat of white paint on the last step of a stairway?

Prepared under the direction of Helen Halter Long, principal, Mamaroneck Jr. High School, Mamaroneck, N. Y., and Forrest E. Long, professor of education, New York University, New York, N. Y. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in U.S.A.

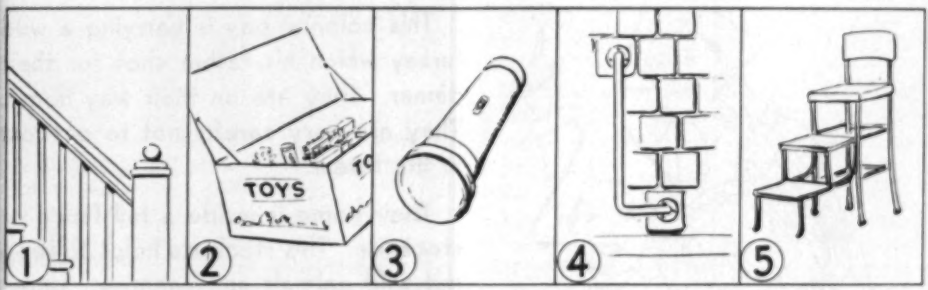
For Our Protection

Copy and—
Write correct answers.

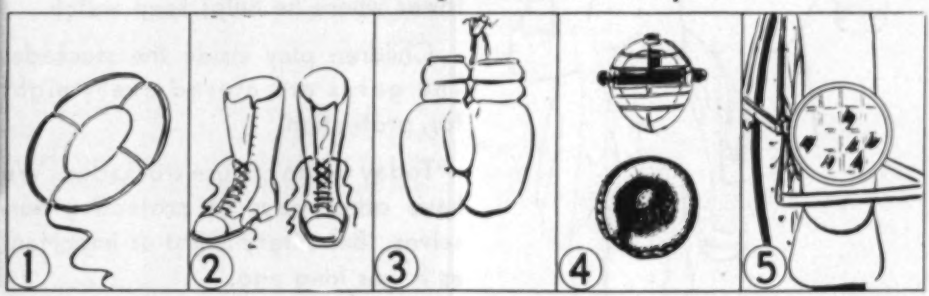
How do These Things Protect our Homes?



How do These Things Protect us at Home?



How do These Things Protect us in Sports?



Answers: "How do These Things Protect our Homes?"—1. By being alert always for conditions which might cause fire. 2. By being alert for drivers who are speeding or otherwise driving unsafely. 3. By correctly repairing electric equipment which might cause a fire if repaired by an amateur. 4. To prevent lightning from striking a house or barn. 5. By making it safer to burn trash because burning pieces are not so likely to blow away and start another fire.

Answers: "How do These Things Protect us at Home?"—1. By giving us something to hold on and not fall. 2. By making a place for toys off floor where they won't cause light when looking for things in closets and moving around the house, when lights are out with no danger of causing a fire. 4. By making a fall in the bathtub less likely if rubber is used regularly as an aid in getting in and out of the bathtub. 5. By making it less likely that a person will fall.

Answers: "How do These Things Protect us in Sports?"—1. Preserver may keep a person from drowning on a boat trip, if boat should tip over. 2. Boots may keep a hiker from tick bites or snake bites. 3. Gloves protect fighters' hands, as well as opponents. 4. Baseball mask and gloves protect catcher from injury. 5. Light reflector may prevent cyclist from being hit by a car.

Answers: "To Talk About"—1. A light-colored raincoat which makes it possible for motorists to see you more easily. 2. You should wear high boots, leggings or gutters to help prevent possible tick or snake bites. 3. It will make you know when you've reached the last step so you do not miss it and try to step onto the floor too soon.

November, 1951

Upper Elementary Safety Lesson Unit

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11 ILL.

Teaching language arts, social studies, physical education and safety

Sketch S9311A

Safety—Our American Heritage

PROTECTIVE DEVICES

What is your American heritage? It is what Americans living before you have created for you. It is your heritage to have free schools; it is your heritage to have public parks; it is your heritage to have the right to attend the church you like; it is your heritage to live as a free man or woman, not as a slave. Part of your American heritage is the right to be safe.

Early settlers in America had to fight for freedom; they also had to fight for safety. They built stockades or tall fences around small settlements to protect themselves from wild animals and enemies. They took turns keeping watch from the stockade towers and they closed the gates at night. They marked trails so that they would not get lost in the forests which covered much of the land in those days. They realized the danger of fire and were careful to prevent blazes which would destroy the possessions which they had brought with them from Europe. They had to be alert for safety every day.

Today we have to be alert for safety, too. Although we do not build stockades, we do use other protective devices for our homes and ourselves.

Do You Know Protective Devices?

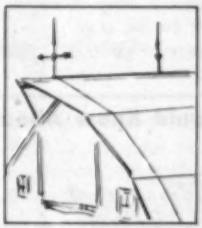
Copy and—

Fill in blanks.

1. To prevent pieces of burning paper from blowing from a trash fire in a yard, it is best to use a _____ _____.

2. To prevent falls on steps, use _____.

3. To make water available in large quantities in case of fire, cities have installed _____ _____.



4. To keep lightning from striking a farm house or barn and starting a fire, many farmers have installed _____ _____.

5. The fuse box in a home helps to prevent _____.

6. Danger from a fireplace fire is prevented by using a _____.

7. Bathtub falls may be prevented by the use of a _____ _____.

8. Toys should be placed in _____.

9. To prevent falls out of windows, screens should be _____.

10. When looking for something, instead of a match or a candle, use a _____.

11. In order to prevent baseball injuries, the catcher should use _____ _____.

12. To keep from being hit by a car at dusk or at night a cyclist should have a bicycle equipped with _____ _____.

13. In a boat those who do not know how to swim should wear _____ _____.

14. For protection against injury, rakes should be left _____ _____.

Prepared under the direction of Helen Halter Long, principal, Mamaroneck Jr. High School, Mamaroneck, N. Y., and Forrest E. Long, professor of education, New York University, New York, N. Y. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in U.S.A.

How to Protect Yourself on Hikes and Picnics

Copy and—
Fill in blanks.

1. Shoes for hiking and picnicking should be _____.

2. Wear gloves, high-laced boots or heavy leggings in snake country. Look carefully before you take a step or place your hand on a tree or _____.

3. When walking through woods stay far enough behind the hiker ahead of you to avoid being hit by _____ which he must push aside.

4. In order to prevent getting lost, learn land marks and know _____ or use a compass.

5. If you must look out over a steep mountain ledge, _____ out to the edge.

6. Remember that it is easier to go _____ a mountain than to go _____.

7. Be sure that your legs are _____ when walking through tall grass where there may be ticks that cause fatal spotted fever.

8. Stay away from high ground or _____ trees in a lightning storm.

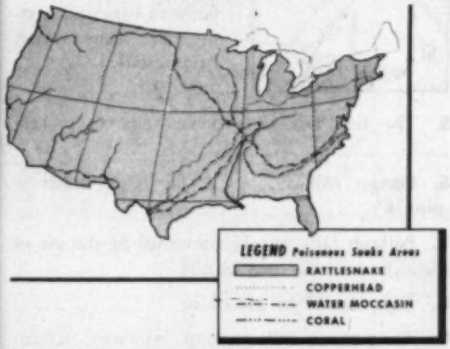
9. Build a fire on a carefully cleared space and, when you leave, pour _____ on it or _____ it.

10. Break a _____ before throwing it away.

11. Don't sample strange _____.

12. To purify drinking water _____ it one-half an hour. To avoid the flat taste of boiled water pour it back and forth from one pan or jar to another.

What You Should Know About Protection Against Snake Bite



Distribution of four "types" of poisonous snakes. The broken lines indicate the northern boundaries of the regions inhabited except for the copperhead which is not found south of the base of Florida.

In the United States there are 132 species of snakes; 20 of these are poisonous. Signs by which snake bite may be recognized are:

1) Bleeding at bite (which may be very slight)
2) A burning pain
3) Rapid swelling
4) Nausea and vomiting
5) Rapid pulse
6) Low blood pressure
7) Discoloration starting at the wound and spreading

Venom travels slowly. There is no danger of immediate death, but if the burning pain and rapid swelling occur together, immediate first aid is called for. The fatal effect of venom does not come for 24 to 48 hours after being bitten.

Get first aid quickly, but calmly.

Precautions to remember:

1. Snakes, as a general rule, will not attack man if the snakes have a chance to escape. For this reason the snake should be given every chance to get out of the way though it seems to be of a harmless variety.

2. In hot, dry parts of the country, many snakes dislike the heat of day, and prowl during the night; therefore a flashlight or lantern should always be carried during the season when snakes are likely to be encountered.

3. Snakes are more dangerous during the spring and summer than they are during the rest of the year. They have been hibernating during the winter and in the spring start out in search of food. They are more likely to attack man because of hunger during these times.

4. Care should be taken when climbing rock piles because snakes have a habit of lurking in rock crevices or under stones.

5. In snake country, it is suggested that one wear high leather boots, puttees or leggings, because most snake bites are in the lower extremities. This will help reduce the hazard of snake bite. Caution should still be exercised, however, because it is possible for a snake to bite through leather and inflict a wound.

Answers: "Do You Know Protective Devices?"—1. trash burner; 2. lights, hand rails or rubber pads; 3. fire plugs or standpipes; 4. lightning rods; 5. fire (because the fuse is the weakest part of the circuit it melts if the load is too heavy; otherwise the wires might get hot enough to cause a fire in the wall); 6. screen; 7. grab rail; 8. a special place or box; 9. lightly secured or locked; 10. flashlight; 11. a mask, glove and chest protector; 12. reflector and light; 13. life preservers; 14. prongs down.

"Hiking and Picnicking"—1. comfortable or high or sturdy; 2. rock; 3. branches; 4. directions; 5. crawl; 6. up, down; 7. covered; 8. single; 9. water, bury; 10. match; 11. berries; 12. boil.

November, 1951

Junior High Safety Lesson Unit

Sketch S9312A

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11, ILL.

For use in English, social studies, shop, guidance and homeroom

The Use of Color for Safety

GENERAL AND SHOP SAFETY

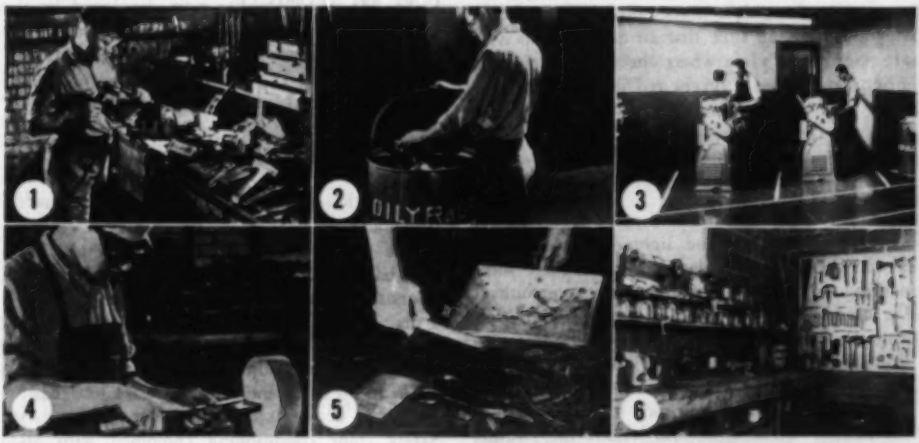
Can Color Help Safety?

Copy and—
Complete sentences, before or after reading unit.

1. Painted stripes on low hanging beams in home basements help safety by _____.
2. Traffic markings painted on streets help safety by _____.
3. Warning paint on inside of machinery guards helps safety by _____.
4. Warning paint on the interior surface of the door of fuse boxes helps safety by _____.
5. Light-colored nonglare paint helps shop safety by _____.

Skill Test in Ability to Draw Conclusions from Pictures

For each picture write at least one conclusion concerning shop safety.



Answers: "Can Color Help Safety?"—1. reminding people to "duck" if necessary. 2. reminding people of where and how to walk or drive safely. 3. reminding people of the necessity of keeping the guard in place. 4. warning people of the danger of shock. 5. reducing eyestrain and interior prevention accidents.

Answers: "Skill Test in Ability to Draw Conclusions from Pictures"—1. reminding people to "duck" if necessary. 2. reminding people of where and how to walk or drive safely. 3. reminding people of the necessity of keeping the guard in place. 4. warning people of the danger of shock. 5. reducing eyestrain and interior prevention accidents.

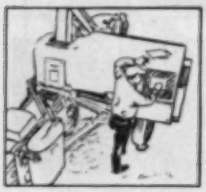
Pictures"—(Note: Any sensible conclusion may be considered correct) 1. A cluttered workshop causes accidents. 2. Placing only rags in a metal container helps to prevent fires. 3. Safe machinings and clear aisles help to prevent accidents. 4. Wear goggles when there is any danger from flying particles. 5. Sweep up metal scraps or broken glass. 6. Store tools where they can be found easily.

Prepared under the direction of Helen Halter Long, principal, Mamaroneck Jr. High School, Mamaroneck, N. Y.; and Forrest E. Long, chairman of the department of secondary education, New York University, New York, N. Y. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in U.S.A.

How to Use Color for Safety

On the Farm

Since farmers have a much higher accident rate than workers in the majority of other industries, it seems important for them to use every precaution to prevent accidents. One new method is through color. Stairs, ladders, the moving parts of machinery are painted with yellow and black caution signs.



Hay Baler

For example, each step of a dangerous barn stairway is highlighted with caution stripes at the edge. Any beams which may be a hazard to tall persons are marked with caution stripes. Caution stripes are painted to emphasize the most hazardous moving parts of farm machinery. The clean-out door of the hay baler is marked; the shields around the tractor power take-off are striped; the movable guard that goes over the take-off shaft of the power mower is painted; the throat opening of the silo blower is marked with paint indicating caution.

The farm workshop is also marked with caution stripes—for example, on the electric saw shield, the handle of a portable grinder, and an emery wheel. The board for hand tools is painted with black silhouettes of the tools to encourage the return of tools to their proper places. It has been known for a long time that an orderly shop is a safe shop. The place where the fire extinguisher is hung is painted a bright red in order that the extinguisher may be seen easily by anyone in case of an emergency.

In Public Places

In many cities and towns the law requires that fire exits be marked and lighted on a separate circuit when a hall is darkened. Are there such markings in the public places in your community? Are there such markings in your school—for example, over auditorium exit doors? Some city ordinances also require the marking of emergency exits in public places and in buses, subways and trolleys. Have you noticed such markings in your community? Some cities also require the posting in a conspicuous color and place of the maximum number of persons allowed in that place. Is this requirement a good idea?

What further use of color could be made to publicize warning and caution signs in the public places in your community—for example, for water safety, fire safety and traffic safety?

In the Factory

Thousands of industrial plants use the magic of color to improve worker efficiency and safety. In 1944 the National Safety Council recommended the use of the American Standards Association Safety Color code. According to this code all safety, fire protection and accident hazards may be identified by color and symbols. This system of colors is standardized in all industrial plants.

As an example, red marks the location of fire-protection equipment; green is used to designate safety and the location of first-aid equipment; yellow with black stripes indicates stumbling, falling or strike-against hazards; white, grey or black is used for housekeeping and traffic markings. Some companies use additional colors, such as orange to warn of danger and equipment that might cut, crush or injure; and blue to mark switch boxes, operating levers and machinery under repair. These last two colors are not a part of the American Standards Association Color code.

In addition to these standard color markings, specific colorful danger, caution and reminder decalcomanias which follow the American Standards Association specifications have been developed by the National Safety Council. Danger signs feature red; caution signs feature yellow; and reminder signs feature green. Do you think that such color warnings would help make employees more safety conscious?

The importance of color for safety is also stressed in the painting of walls, machines and floors to eliminate contrasts and glare. If there is a sharp contrast in brightness, such as that between a dark machine and white wall, the eyes must make very rapid adjustments. Such adjustments result in eyestrain and fatigue. We know that the danger of accidents increases when fatigue exists. Safety color conditioning combined with good lighting reduces color contrasts. Painting machines a light color and brightening dark floors with light-colored paint or linoleum helps lessen eye fatigue.

Summarizing practice: write a paragraph summary on "How to use Color for Safety."

November, 1951

Senior High Safety Lesson Unit

SCHOOL AND COLLEGE DIVISION—NATIONAL SAFETY COUNCIL—CHICAGO 11, ILL.

For use in English, American history, American problems, shop, guidance and homeroom

Sketch S9312A

The Use of Color for Safety

GENERAL AND SHOP SAFETY

Introduction

Modern America uses color for beauty, efficiency and safety. Analysis of color and color reflection has resulted in improved safety in home, school, office and factory. The use of color markings to indicate hazards has helped the cause of accident prevention in traffic, on the farm and in shops everywhere.

The Workshop—Why Not Make It Safe?

More accidents occur in the vocational shops of secondary schools than in any other place in the school building, except for the gymnasiums. We do not know how many student hours are spent in the shops or in gymnasiums. We have reason to believe, however, that on the basis of student hours there would be more accidents in vocational shops than in any other place in the school building. Although the shop record has been improving, more can be done to reduce accidents.

Copy and—
Fill in blanks.

1. Use _____ to mark guards that should be kept in place.
2. Wear _____ sleeves.
3. Use the _____ tool for the job; for example, not a screw driver as a pry.
4. Use _____ to paint a backdrop for place where tools should be kept.
5. Keep aisles _____; paint aisle lines.
6. Don't wear _____ around machinery.
7. Act your _____; don't play practical jokes.
8. Keep tools and equipment off the _____; keep working tools in a carrier.
9. _____ up broken glass—do not pick it up with bare hands.
10. To prevent eyestrain eliminate _____ between light and dark colors; have light-colored floors, walls and machines.
11. Before you grease or oil a machine, _____ it.
12. Never leave tools where they may _____ or where someone may trip over them.
13. Do not use steps to _____ things, even temporarily.

14. Never reach over or around the circular saw while it is in _____.
15. _____ all portable electric tools.
16. Post colored reminder caution _____ in the shop.
17. Hand tools to others; don't _____ them.
18. Poorly piled materials are dangerous; a safe pile has no _____ ends.
19. Always wear safety _____ when operating any high-speed revolving machines.
20. Store paints, lacquers and thinners in covered cans in a _____ cabinet.

How Can Color Influence Safety in These Home Items?

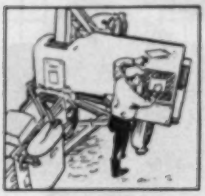
1. Protruding overhead beams in the basement
2. Power saw
3. Hand tools
4. Refuse cans
5. Dark hallways

Prepared under the direction of Helen Halter Long, principal, Mamaroneck Jr. High School, Mamaroneck, N. Y.; and Forrest E. Long, chairman of the department of secondary education, New York University, New York, N. Y. 1 to 9 copies of this unit, 6 cents each. Lower prices for larger quantities. Printed in U.S.A.

How to Use Color for Safety

On the Farm

Since farmers have a much higher accident rate than workers in the majority of other occupations, it seems important for them to use every precaution to prevent accidents. One new method is through color. Stairs, ladders, the moving parts of machinery are painted with yellow and black caution signs. For example, each step of a dangerous barn stairway is highlighted with caution stripes at the edge. Any beams which may be a hazard to tall persons are marked with caution stripes. Caution stripes are painted to emphasize the most hazardous moving parts of farm machinery. The clean-out door of the hay baler is marked; the shields around the tractor power take-off are striped; the movable guard that goes over the take-off shaft of the power mower is painted; the throat opening of the silo blower is marked with paint indicating caution.



Hay Baler

The farm workshop is also marked with caution stripes—for example, on the electric saw shield, the handle of a portable grinder, and an emery wheel. The board for hand tools is painted with black silhouettes of the tools to encourage the return tools to their proper places. It has been known for a long time that an orderly shop is a safe shop. The place where the fire extinguisher is hung is painted a bright red in order that the extinguisher may be seen easily by anyone in case of emergency.

In Public Places

In many cities and towns the law requires that fire exits be marked and lighted on a separate circuit when a hall is darkened. Are there such markings in your school—for example, over auditorium exit doors? Some city ordinances also require the marking of emergency exits in public places and in buses, subways and trolleys. Have you noticed such markings in your community? Some cities also require the posting in a conspicuous color and place of the maximum number of persons allowed in that place. Is this requirement a good idea?

What further use of color could be made to publicize warning and caution signs in the public places in your community—for example, for water safety, fire safety and traffic safety?

In the Factory

Thousands of industrial plants use the magic of color to improve worker efficiency and safety. In 1944 the National Safety Council recommended the use of the American Standards Association Safety Color code. According to this code all safety and fire protection and accident hazards may be identified by color and symbols. This system of colors is standardized in all industrial plants.

As an example, red marks the location of fire-protection equipment; green is used to designate safety and the location of first-aid equipment; yellow with black stripes indicates stumbling, falling or strike-against hazards; white, grey or black is used for housekeeping and traffic markings. Some companies use additional colors, such as orange, to warn of danger or equipment that might cut, crush or injure; and blue to mark switch boxes, operating levers and machinery under repair. These two last colors are not a part of the American Standards Color code.

In addition to these standard color markings which serve as reminders to exercise caution and to maintain safe housekeeping conditions, specific colorful danger, caution and reminder decalcomanias which follow the American Standards Association specifications have been developed by the National Safety Council. Danger signs feature red; caution signs feature yellow; and reminder signs feature green. Do you think that such color warnings would help make employees more safety conscious?

The importance of color for safety is also stressed in the painting of walls, machines and floors to eliminate contrasts and glare. If there is a sharp contrast in relative brightness, such as that between a dark machine and white wall, the eyes must make very rapid adjustments. Such adjustment results in eyestrain and fatigue, and we know that the danger of accidents increases when fatigue exists. Safety color conditioning combined with good lighting reduces color contrasts. Paint dark machines a lighter color and brighten dark floors with light-colored paint or linoleum.

Summarizing practice: write a paragraph summary on "How to use Color for Safety."

Answers to "How can Color Influence Safety in These Home Items?"—1. By caution stripes on any low beams. 2. By caution color on guard to remind one to keep it in place. 3. By a painted outline of place where tools should hang. 4. By a painted outline of place where the cans should stand so that people are encouraged to put refuse in them. 5. By painting them a light color so that darkness does not cause accident.

Answers to "The Workshop—Why Not Make It Safer?"—1. color; 2. short; 3. correct; 4. color; 5. clear; 6. rings, gloves, tie or long sleeves; 7. age; 8. floor; 9. Sweep; 10. control; 11. stop; 12. fall; 13. store; 14. motion; 15. Ground; 16. signs; 17. throw; 18. irregular; 19. goggles; 20. metal.

SAFETY SAVES LIVES!

MAKE YOUR SCHOOL SAFER BY OUTFITTING SAFETY PATROLMEN WITH OUR EXCELLENT EQUIPMENT. Here are just a few of our items:

SAFETY PATROL BELTS in white web or plastic, or yellow plastic. Rustproof nickel hardware.

WHITE RAINCOATS made of 100% American Rubber. Also available in yellow or black. Highly visible.

METAL PATROL BADGES that command respect. Official importance is given your safety patrolmen. Gold finish for officers, nickel for members. Fasten by pin clasp.

ARM BANDS in colorful red and silver aluminum. Curved to fit the arm, complete with leather strap. Brassard style.

SAFETY IS IMPORTANT! ENCOURAGE IT!
SEND FOR CATALOG AND PRICE LIST TODAY!

GRAUBARD'S 266 Mulberry St., Newark 5, N. J.
"America's Largest Safety Patrol Outfitters"

Bomb Danger

from page 5

as a liaison person with parents in the metropolitan areas from which the children were removed.

Preliminary plans would involve the determination of satisfactory collection points, proper identification of the children and their baggage, information as to the minimum and maximum baggage allowance, and similar items.

Educational Responsibilities to Children.

Not only do schools have a protective responsibility but there is a grave need for carefully prepared instructions to children concerning the basis for the current disturbances which make these air-raid precautions so necessary. Certainly there would be a great difference between what could be conveyed with understanding to a high school student in contrast with what a kindergartner would comprehend. Each child must be taught in keeping with his ability to understand and his ability to react with a minimum of fear to the realities of the situation. But each child must be taught!

Not too much material has been carefully developed thus far in this area. We have, perhaps, been more concerned with the protective aspects as an immediate need. In addition there has been some honest difference of opinion as to just how much children could be taught without courting the danger of mass hysteria and panic if and when the bombs fall.

Correlated with the problems just outlined are some practical instructional problems which are a responsibility of both the school and parent. Among these would be what special practical instructions should be given to children to govern the child's conduct if an atomic explosion occurred while the child was at home, on the street, at play or in a public place. Also, what instruction should be given on recognizing the blast by the initial flash of light, the need for haste in seeking shelter, the determining which kinds of available protection are best.

There is general agreement, however, on the advisability of teaching first aid at the elementary school level, the junior and senior high levels. This teaching has a moral value for normal living to say nothing of its potential value under war conditions.

In Detroit we are teaching first aid in the sixth, ninth and twelfth grades.

Educational Responsibilities to the Community.

Another major educational responsibility of the schools is that of making available to the community the teaching ability of our profession as an aid to the over-all civil defense program. During the last war 75 percent of the air-raid wardens in Detroit were instructed by Detroit school teachers who had qualified as civil defense instructors. In addition, many teachers qualified as lay instructors in first aid.

During the present emergency not only is there much work to be done in the areas just mentioned but there is also instruction needed in the processes of decontamination of radioactive areas and in many other fields of civil defense.

Detroit's 930 cafeteria and lunchroom employes stand ready to man our school's feeding facilities which have a normal capacity of 68,572 meals per day.

Detroit's 12,000 school employes, including both contract and non-contract personnel, are of course going to be utilized not only in the operation of the school plant but also as shelter managers, registrars, first aid personnel and in other welfare services.

Let me repeat, regardless of what our personal beliefs are concerning the imminence of atomic attack we bear a very heavy moral responsibility.

PLASTIC SAM BROWNE BELTS FOR GREATER SAFETY

Available in either white or Federal yellow, these plastic belts glisten in the sun and are bright on dark days. Flexible—Smartly Styled —Adjustable—Easily Cleaned.

Federal Yellow Flags with desired lettering and Yellow Raincoats with Hats and Cape Caps to match complete the attire of your School Patrol.

Endorsed by Safety Councils, Auto Clubs and School Authorities Everywhere

The M. F. MURDOCK CO.

AKRON 8, OHIO

Learning Is Useless

from page 9

basic training for every child. Understanding is acquired and attitudes are developed through carefully planned instruction which provides an opportunity for developing skills.

Not a One-Period Subject

Attitudes towards living safely cannot be developed through instruction in one school hour of one school day. Safe living must permeate the teaching of every school subject in the curriculum and should be an all-day, everyday, program. Children ned experiences upon which to build knowledge. With resourceful teachers such experiences can readily be had in the course of the school day.

Safety education is effective only when there is a definite carry-over from school to home. Safety is an all-round the clock activity which needs thought not only during school hours, but after school, on Saturdays, Sundays, th- ugh holidays and during vacation periods.

During the course of the development at Jackson school, groups of parents were invited to the classroom to observe and to comment upon the activities in which their children were engaged.

A motion picture was made in each class showing the children at work on the projects which have been described in this article. This film has been used in parent teacher association meetings not only as a safety education device but also as a public relations medium for demonstrating to parents and to the public generally the practical applications of school lessons to everyday living. The experiences of parents, teachers, police and children, working together has definitely illustrated that safety education can be promoted not part of the time but all of the time.

COMING EVENTS

November 1-3, Washington
Conference to devise tentative minimum standards for the integral and transit-type school bus (Shoreham Hotel). National Commission on Safety Education, National Education Association, 1201 Sixteenth St., N.W., Washington 6, D. C.

November 6-8, Highland Park, Ill.
Third National Conference on Physicians and Schools. (Moraine Hotel). Bureau of Health Education, American Medical Association.

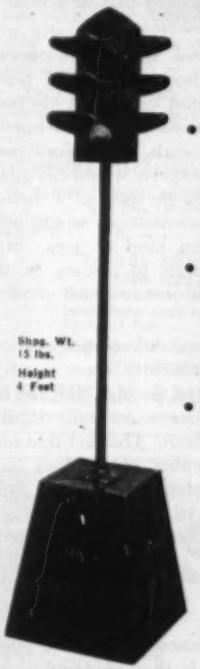
November 11-17
American Education Week.

November 12-14, New York City
School Food Service Association.

February 23-27, St. Louis
American Association of School Administrators.

MAKE SAFETY TEACHING EASIER with the NEW

TRAFFIC LIGHT INSTRUCTOR



- Duplicates actual stop-and-go lighting cycles.
- Brings safety lessons to life for more effective instruction.
- Has sturdy, yet light-in-weight construction for easy handling and long service life.

NOW YOU CAN duplicate true traffic situations right in the classroom! The new Traffic Light Instructor which is manual in operation, duplicates the actual lighting cycle of real traffic signals. *Just 4 feet high,* the Instructor Light is ideal for elementary schools, high school and driver training schools. It's all-metal constructed, with shatter-proof plastic lenses. Operates on any 110 volt A.C. outlet. No special wiring needed—just plug it in. Comes complete and fully assembled. Models available to fit all local lighting sequences. Place your order NOW!

Prices and full details available on request. Write the address below.

NEW TEACHING MANUAL for traffic safety instruction. One copy free to qualified personnel. A practical 16-page guidebook on safety teaching. Prepared by a national teaching authority. Write on your official letterhead.

SCHOOL SAFETY LIGHT CORP.

214 Schofield Bldg. • Cleveland 15, Ohio

Civil Defense

from page 2

defense program in operation.

Twenty-five and nine-tenths percent were preparing policies and plans.

Thirteen and four-tenths percent has asked local or state officials for advice on what steps to take.

Only 35.4 percent had at that time done nothing specific.

Early efforts by school systems to provide for civil defense have been marked by many problems. Among the most significant has been that of conflicting information on how to handle specific phases of the work. Directives from civil defense and other experts would designate a certain type of area to be used as a shelter, while subsequent recommendations would indicate an entirely different kind of area. Suggested positions for pupils to assume in the shelter area were also subject to much conflicting opinion.

At the beginning of civil defense preparations within almost every community, there was fear among both educators and parents that the defense program might prove emotionally disturbing to many school children. The fact that only an extremely small number of children have been upset by civil defense drills is a great tribute to the manner in which teachers and school officials hav handled their civil defense programs.

Much Like Fire Drills

One approach widely used in preparing pupils for civil defense drills is that of pointing out the analogy between fire drills and civil defense drills. Many classroom teachers have explained that fire drills are held—even though we do not expect a fire at every moment—so that everyone will know what to do if and when one does occur. Similarly, civil defense drills are an intelligent precaution against another possible danger.

England's experience during World War II indicates that the best guarantee of a good attitude on the part of pupils is good teacher attitude, brought about by complete understanding of the aims, methods, and provisions of the school civil defense program.

During the last war, school personnel were quick to realize the uniqueness and the significance of the role they would have to play in the event of an enemy attack. It is only in the schools that one person must be responsible for the safety of many others too young to care for themselves.

Obviously, it is for this reason that thorough planning and preparation are so necessary.

In order to meet this new need and to face this additional hazard in modern living, school systems throughout the country have set up civil defense organizations. In many localities where there is a safety education specialist or supervisor within the school system, it has seemed logical to assign to him the responsibility of civil defense preparations. Other localities—especially those where danger of enemy attack is felt most keenly—have assigned an additional staff member to attend solely to civil defense matters.

Movie in Preparation

A great many civil defense recommendations have been prepared and distributed by city and county school systems as well as by state education departments. In addition to shelter and drill instructions, units of study have been circulated to teachers for incorporation with the regular instructional program, and take-home pamphlets have been given to pupils of all grade levels.

Recently, Federal Civil Defense Administration officials, in recognition of the special problems and hazards of a school defense program, have given particular emphasis to school defense.

A motion picture on "Schools and Civil Defense" is now being filmed and should be available for sale and rental before the end of the year. Although primarily for use in elementary schools, the film should also have much appeal for junior and senior high-school students. Emphasis is placed on the surprise or "flash" attack and the main objective is to help students to understand the procedures they should follow.

Duck and Cover

The film points out that in a flash attack there would not be time to seek substantial shelter, that the proper procedure is to drop to the ground, face down, and try to cover exposed parts of the body in the best way possible. This principle of "duck and cover" is applied to children in the classroom, in the cafeteria, on the playground, on the way to school, and in several other common situations.

Content and subject matter for the film were outlined by an advisory committee appointed by the National Commission on Safety Education of the NEA, at the request of the Federal Civil Defense Administration. The committee included classroom teachers, supervisors, and

school administrators from both public school systems and private schools.

The commission was also asked to help in the preparation of a manual to guide state and local superintendents of schools in "organizing and operating programs for the self-protection of schools, their physical facilities, and their student bodies." This manuscript is now being reviewed by educators and Federal Civil Defense Administration officials. It will be printed by the U. S. government printing office and will be available for distribution late in 1951. Answers will be included to many of the somewhat technical questions confronting school people in planning effective civil defense measures.

On the whole, educators throughout the country have approached the civil defense problem wisely. They see an air attack as another potential hazard of modern living. They are, therefore, anxiously taking all the precautions within their power to reduce the danger of this threat, realizing that necessity for the steps they are now taking may prove temporary or may become a permanent part of living in today's world.

Approve Women Guards

from page 12

ment of school crossing guards is definitely in the best interests of community welfare."

In January, this year, the Common Council authorized an increase in the number of women employed. There are now 100.

Any city facing the problem of getting children to and from school safely should, by all means, try this most efficient and most economical system.

Women if given a chance will safeguard the youngsters and will relieve the highly trained regular police officers for proper police duty.

Do we like women as school crossing guards in Milwaukee?

You bet we do!

Safety Education Makes Danger Less Dangerous

Safety education is like insurance; . . . it does not keep us out of the danger zone, but it makes all danger less dangerous. By protecting the person, it makes possible the enrichment of the personality.—Herman H. Horne. A Philosophy of Safety and Safety Education. *Safety Education Digest,* July, 1940.

for

SAFETY PATROL EQUIPMENT

Send for new circular of Sam Browne Belts, Arm Bands, Badges, Safety and School Buttons.
We can furnish the Sam Browne Belts in the following grade—adjustable in size. The "Bull Dog" Brand Best Grade For Long Wear White Webbing 2" wide at $15.00 Per Doz. $1.50 each small lots.

3¾" ARM BANDS

Celluloid front — metal back. Web strap and buckle attachment.
No. 33 Blue on white stock design JUNIOR SAFETY PATROL.
No. 44 Green on white

SAFETY COUNCIL PATROL UNIVERSAL SAFETY with title Patrolman or Captain

Per Dozen	$5.00	Lots of 50	28c each
Lots of 25	30c each	Lots of 100	25c each

PATROL BOY RAINCOATS AND HELMET SETS

Dull finish black rubber, sizes 6 to 16.
Safety Patrol Caps made to order. Blue, Black and Red.

Write for our Safety Patrol Circular

OUR RECORD 51 YEARS

AMERICAN BADGE COMPANY

129 West Hubbard corner La Salle, Chicago 10, Ill.

STOP

SAV-A-LIFE

Give the school children in your community the inexpensive—but vital—added protection provided by a SAV-A-LIFE TRAFFIC CONTROL LITE.

The SAV-A-LIFE LITE is a complete, portable, self-contained unit. Flashing, eye level, red or amber light—beamed in both directions—is visible over a mile. Weatherproof, the light is operated by a standard auto battery —has its own charger.

$74.50 fob without battery

SAV-A-LIFE **CO.** PO Box 757 Gashland, Mo.

TRADE PUBLICATIONS

The following publications are intended for the guidance of those responsible for the purchase of equipment to promote safety in the school. The coupon below will bring FREE to responsible school personnel any or all of those listed.

1. **"Educational Catalog":** Comprehensive listing of picturol filmstrip, color slide sets, projectors and accessories suitable for school work—all grades. Also films on safety at school, at play, and at home. Society for Visual Education.

2. **Safety on the Highway:** Folder describes the Magno-Saf-T Board, designed as a classroom aid in demonstrating safety on the highway. Magnetized models and road layouts enable the instructor to visualize safety principles by simulating traffic problems. Magno-Saf-T Board.

3. **"Mercurochrome, Its Use in First Aid":** Booklet includes sections entitled: the cleaning of dirty wounds, applying Mercurochrome, when to use Mercurochrome, first aid kits, and stains. Also explanatory sections on infection, microbes and the need for antiseptics. Written for use in teaching first aid. Hynson, Wescott & Dunning, Inc.

4. **Portable Stop Light:** Folder describes Sav-A-Life Lite, a weatherproof, portable, stop light and sign for use at school crossings. Powered by battery, the flashing stop light is fixed at driver eye-level. Sav-A-Life Lite Corp.

5. **Bulletin Boards:** Information on Dav-Son cork back bulletin boards, gummed paper letters and figures, and name plates. Bulletin boards in various styles with or without glass. Specifications and prices included. A. C. Davenport & Son, Inc.

6. **Safety Patrol Equipment:** Illustrated brochure describes belts, rubberized coats and hats, and warning flags for safety patrols. Featured are the yellow warning flags designed for better visibility. M. F. Murdock Co.

7. **Group Washing:** Illustrated booklet on Bradley Washfountains designed expressly for group washing. Circular or semi-circular, hand or foot controlled washfountains, "5-in-a-group" showers, washroom plans and layouts featured. Bradley Washfountain Co.

SAFETY EDUCATION NOVEMBER, 1951
425 North Michigan Avenue, Chicago 11, Ill.

Please have sent to me the publications checked.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐

Name.....

Title.....

School.....

Address.....

City.....

Pupil-Teachers

from page 25

wholesome influence in promoting good driving practices among students.

In the second place the students who were chosen accepted their responsibility with a great deal of enthusiasm and pride. They were warned that any misconduct, either in or out of school, would disqualify them from continued service. The instructor was surprised however last year when one of his best student assistants resigned from his position because of an accident he had had in his father's car the night before which he said was his own fault. In this case the student was placed on probation for a limited period and then reinstated.

The program of student assistants has been a decided success in the Port Neches Schools and has reduced the teacher-pupil cost of this program to that of an average academic classroom teacher. It has also made possible greater efficiency of the driver training program.

This discussion would not be complete without giving some appraisal of the driver education program as a definite part of the educational offerings of our school. No statistical follow-up of driver performances has been carried on. However, there are certain results apparent to school officials and to the general public:

Students who have had the driver education program have a better knowledge of the motor vehicle, its care, cost of operation, etc. Parents and teachers report more considerate use of the family car by these students.

Their sense of responsibility is better; on the whole they are aware of the need for courtesy and consideration on the road.

The show-off instinct is minimized among school students. Since the driver's license examinations are given at the school, the importance of skill in driving an automobile competes heavily with the former show-off who jeopardizes the lives of himself and his friends. This finds itself expressed when students are in the car with irresponsible young drivers. Pretty soon the word gets around that so-and-so is too dangerous to ride with.

Many parents have reported improvement in their own driving habits as a result of their children's influence.

It would seem that use of student assistants should offer advantages in other schools of any size, both from the standpoint of economy and citizenship training, and as an opportunity of extending the school's program.

Medal of Honor

Sergeant Charles Turner, of Boston, Massachusetts—Medal of Honor, Korea. On September 1, 1950, near Yongsan, Korea, Sergeant Turner took over an exposed turret machine gun on a tank. Despite fifty direct hits on the tank, he stayed by his gun and destroyed seven enemy machine gun nests before he was killed.

You and your family are more secure today because of what Charles Turner did for you.

Sergeant Turner died to keep America free. Won't you see that America *stays* the land of peace and promise for which he gave his life? Defending the things he fought for is *your* job, too.

One important defense job you can do *right now* is to buy United States Defense* Bonds and buy them regularly. For it's your Defense Bonds that help keep America strong *within*. And out of America's inner strength can come power that guarantees security—for your country, for your family, for *you*.

Remember when you're buying bonds for defense, you're also building a personal cash savings. Remember, too, if you don't save *regularly*, you generally don't save at all. So sign up in the Payroll Savings Plan where you work, or the Bond-A-Month Plan where you bank. For your country's security, and your own, buy United States Defense Bonds!

U.S. Savings Bonds are Defense Bonds - Buy them regularly!

The U. S. Government does not pay for this advertisement. It is donated by this publication in cooperation with the Advertising Council and the Magazine Publishers of America as a public service.

use MERCUROCHROME*

for first aid

Do not neglect wounds, however small; even scratches and small cuts may become infected if they are not properly treated.

'Mercurochrome' (H. W. & D. brand of merbromin, dibromoxymercurifluorescein-sodium) is one of the best antiseptics for first aid use. It is accepted by the Council on Pharmacy and Chemistry of the American Medical Association for this purpose.

The 2% aqueous solution does not sting and can be applied safely to small wounds. Children do not hesitate to report their injuries promptly when 'Mercurochrome' is the household antiseptic, because they know that they will not be hurt. Other advantages are that solutions keep indefinitely and the color shows just where it has been applied.

Doctors have used 'Mercurochrome' for more than 28 years.

Keep a bottle of 'Mercurochrome' handy for the first aid care of all minor wounds. Do not fail to call a physician in more serious cases.

* Reg. U. S. Pat. Off.

HYNSON, WESTCOTT & DUNNING, INC.

BALTIMORE, MARYLAND